ANNUAL REPORT

ON

VACCINATION IN THE MADRAS PRESIDENCY

AND ON THE WORK OF THE

VACCINE SECTION

OF THE

KING INSTITUTE OF PREVENTIVE MEDICINE, GUINDY

FOR THE YEAR

1913-14.

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1914.

REPORT ON VACCINATION IN THE MADRAS PRESIDENCY FOR THE YEAR 1913-14.

From Major W. A. JUSTICE, M.B., C.M., D.P.H., I.M.S., Sanitary Commissioner for Madras, to the Secretary to Government, Local and Municipal Department, dated the 27th August 1914, No. 321/V.

I have the honour to submit herewith my annual report on the working of the Vaccination Department in the Madras Presidency during the official year 1913-14. Under G.O. No. 1455, Public, dated 12th July 1886, annual statistical tables, with the briefest possible notes, for two years and a full report in the third year relating to vaccination, should be submitted to Government. Year after year, however, the report of the Inspector of Vaccination contained complete particulars, both in statistical tables and in notes, about the operations of the department in that particular year; and I propose therefore to confine my remarks in the present report mainly to the working of the department in 1913-14.

2. *Vaccine section of the King Institute, Guindy.*—The report of the Director, King Institute, Guindy, on the working of the vaccine section of the institute during 1913-14 is enclosed. The work of the section has been satisfactorily performed by all and reflects great credit on the officers immediately in charge.

A. General.—The Assistant Director continued to be in direct charge of the section during the year under report. Captain W. S. Patton, I.M.S., the present Assistant Director, contributes an interesting article on "Some observations on the production of cow-pox vaccine at the King Institute as shown by the statistics during the last decade." It is attached to the Director's report as an annexure. Any remarks made on the technical points referred to in this article will be out of place in an administration report and I do not therefore propose to say anything about them here.

The total quantity of vaccine supplied by the institute during 1913-14 amounted to 1,972,165 cases against 1,887,639 cases in the previous year and was the highest on record since the institute was opened. Compared with 1912-13, the supplies to the Military Department during the year showed a large increase—27,587 cases against 12,333 cases. The number of cases despatched to the Agency tracts and to private bodies showed, however, a slight decrease. As in previous years the bulk of the vaccine supplied was in the form of lanoline paste. Madras City and Colombo continued to take glycerinated vaccine.

The required number of calves was obtained at the institute, the contractors having undertaken to meet all demands. There was therefore no necessity to have a reserve supply of calves. The opening of "reserve calf" and "done calf" depôts ordered by Government in G.O. No. 1120, Revenue, dated 17th April 1912, has since been abandoned as the present method of obtaining calves and of disposing of them through private contractors is working satisfactorily.

The system of despatching vaccine three issues in a month instead of two to mufassal stations was followed in three of the districts where the "Trial scheme" was in force. The results reported having been satisfactory, proposals for its extension to the remaining "Trial scheme" district (Madura) are under consideration.

B. Cost.—The total net expenditure of the vaccine section rose in 1913–14 to Rs. 48,912-15-11 by Rs. 2,945-0-8.

The increase occurred mainly under "Establishment charges." This increased expenditure enhanced the cost per case of vaccine by 0·07 pies to 4·840069 pies.

C. Quality of vaccine.—The success rate of the vaccine manufactured at the institute was as usual highest during the colder months of the year and showed an average improvement of 3·6 per cent. over that of last year's. February showed the highest success rate of 96·36 per cent. and June the lowest 81·61 per cent. In the previous year the highest and lowest rates were recorded in January (93·00) and May (80·57), respectively. Considered with reference to districts, the average district success rate was 91·63 per cent. against 88·05 per cent. in 1912–13. Ramnad headed the list with a success rate of 97·76 per cent: the lowest was recorded in Coimbatore (78·92 per cent.). The success rates in the latter district were a matter of adverse comment during recent years and was attributed to the existence of some local factors. A slight improvement is noticeable in the year under review, evidently due to the change of personnel of the vaccination staffs recently effected in the district.

VACCINATION DEPARTMENT.

A. Staff.—Captain O. A. R. Berkeley Hill, I.M.S., was in charge of the office of Inspector of Vaccination from 1st to 24th April 1913, when he was transferred. No officer having been appointed to take his place I took charge of the office and retained it until 15th June when Captain M. J. Quirke, I.M.S , the permanent incumbent, returned to duty from leave. He continued to hold it until the receipt of orders of Government in G.O. No. 1416 Public, dated 17th November 1913, when the new scheme of having three Deputy Sanitary Commissioners for the Presidency was introduced. Under this scheme the Presidency should have three ranges, viz., Northern Range, Central Range and Southern Range, each in charge of a Deputy Sanitary Commissioner and Inspector of Vaccination, the head-quarters of the three ranges being Waltair, Madras and Coimbatore, respectively. Dr. K. T. Matthew, D.P.H., D.HY. (*Cantab*), was appointed to the Northern Range, Captain M. J. Quirke, I.M.S., to the Central Range and there being no officer available, I was placed in charge of the Southern Range in addition to my duties as Sanitary Commissioner. This arrangement continued till the end of the year. I have since been relieved of the Southern Range duties, Captain Quirke having taken them up under orders of Government in addition to his own, pending the appointment of the third Deputy Sanitary Commissioner.

The subordinate vaccination staffs employed in the Presidency during the past three years are exhibited in the following statement:—

Years.	Deputy Inspectors.			First-class vaccinators, Rs. 20–15.	Second-class vaccinators, Rs. 12–10.	Third-class vaccinators, Rs. 7–5.	Total number of vaccinators.
	First grade, Rs. 70.	Second grade, Rs 60.	Third grade, Rs. 40.				
1911–1912	21	24	37	263	467	120	850
1912–1913	21	23	38	266	450	121	837
1913–1914	23	23	36	270	443	125	838

Note.—These figures include the staffs employed in Bangalore and Secunderabad cantonments and exclude those on duty in the King Institute, Guindy. In the latter Institute there are three Deputy Inspectors of the first grade and two of the second grade.

The rates of pay allowed to vaccinators are absurdly low, the minimum being Rs. 5 per mensem. The consequence is that men recruited for these posts are next to useless. The work turned out by such a class of men can hardly

be expected to be satisfactory. With the employment of qualified vaccinators (*i.e.*, sanitary inspectors with special training in vaccination in the King Institute, Guindy,) on higher rates of pay, better results may be expected. The question of improving the personnel and the pay of these staffs is at present engaging the attention of the District Boards in the Presidency. (G.O. No. 1814 L., dated 23rd October 1913.).

B. Inspection by Deputy Sanitary Commissioners.—During the major portion of the year, there was only one Deputy Sanitary Commissioner on duty in the whole of the Presidency. Captain Quirke did satisfactory inspection work during the year under report. Among the places visited by him were Puttur, Karvetnagar, Pallipatti and Narayanavaram villages in the North Arcot district, taluks of Nandyal, Markapur and Cumbum in the Kurnool district and municipalities of Tirupati, Vellore, Vāniyambādi, Gudiyāttam and Cuddalore. He also attended the Sanitary Conference in Lucknow as a delegate from this Presidency.

During the short period Dr. Matthew was on duty as Deputy Sanitary Commissioner, he inspected the municipalities of Negapatam, Guntūr, Bezwada, Anakapalle, Rajahmundry, Berhampur and the villages of Nidubrolu, Ponnur, Patasola, Tadipuru, Pattareddipalaiyam, Chibrolu Vadlamudi and Munipalle. The inspection of Negapatam was specially undertaken when plague broke out in that town. The steps taken by him during his visit to combat the epidemic proved satisfactory.

C. Vaccination.—As in previous years, the "Trial Scheme" of vaccination under which both the registration of births and deaths and infantile vaccination are compulsory was in force in the whole of the Chingleput district and in selected areas in North Arcot, South Arcot and Madura districts. The Government have since abandoned the general introduction of the scheme throughout the Presidency as "there are large areas in which its introduction would for the present be inadvisable" (G.O. No. 1814 L., dated 23rd October 1913). This system of compulsory registration of vital statistics and of compulsory vaccination throughout the Presidency must be brought about sooner or later and until this is done, vaccination will not make any appreciable progress in this Presidency.

D. The following table exhibits the total vaccination work performed by all agencies throughout the Presidency during the last three years:—

—	1911-12.	1912-13.	1913-14.
Primary vaccination	1,455,485	1,461,790	1,527,112
Re-vaccination	147,492	124,554	150,584
Total ...	1,602,977	1,586,344	1,677,696

Compared with the two previous years, the number of cases vaccinated during 1913–14 showed a considerable increase which is satisfactory. The districts which showed largest increases were Guntūr (+ 25,301), Vizagapatam (+ 11,554), Ganjām (+ 9,566), Malabar (+ 7,605), Kistna (+ 6,320), and Coimbatore (+ 5,114). Only three districts showed a decrease: they were Tanjore (– 16,642), Chingleput (– 4,184) and Anantapur (– 712).

The reasons assigned by the Deputy-Inspectors of Vaccination for this decrease were (1) non-prevalence of small-pox in Tanjore and Chingleput districts, and (2) failure to appoint proper substitutes during the leave vacancies of vaccinators in all the three districts in question. The difficulty to secure proper substitutes was probably due to the low rates of pay allowed to the last grade of vaccinators to which alone acting men could be appointed. This disability should disappear on the introduction of the new scheme which allows higher rates of pay to this class of vaccinators in rural areas.

E. The total successful vaccinations by all agencies and the percentage of successful cases including re-vaccination during the three previous years are shown in the following statement :—

Establishment.	Number of successful vaccinations.						Total of successful vaccinations.	
	1911–12.		1912–13.		1913–14.			
	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	1911–12.	1912–13.
1	2	3	4	5	6	7	8	9
Local Fund vaccinators ...	1,133,151	60,260	1,118,543	54,641	1,223,086	73,796	1,193,411	1,173,184
Government do. ...	10,545	851	13,254	1,263	17,015	1,597	11,396	14,517
Municipal do. ...	103,028	28,499	99,018	28,647	106,611	26,160	131,527	122,665
Cantonment do. ...	3,421	4,169	4,689	1,250	4,916	4,212	7,590	5,931
Dispensaries ...	60	63	11	72	6	10	123	83
Medical subordinates ...	322	5,882	118	5,133	114	5,363	6,204	5,251
Total ...	1,250,527	99,724	1,235,625	86,006	1,351,748	111,138	1,350,251	1,321,631

Establishment.	Total of successful vaccinations—*cont*	Ratio per cent. of successful cases.						Ratio per cent. of total successful cases.		
		1911–1912.		1912–1913.		1913–1914.				
	1913–14.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	1911–12.	1912–13.	1913–14.
	10	11	12	13	14	15	16	17	18	19
Local Fund vaccinators ...	1,296,882	89·3	79·8	88·0	80·2	91·5	84·3	88·7	87·6	91·1
Government do. ...	18,612	93·4	92·1	86·5	93·5	91·2	91·5	93·3	87·0	91·2
Municipal do. ...	132,771	94·2	72·2	93·2	76·2	95·7	75·0	88·3	89·3	90·8
Cantonment do. ...	9,128	95·6	81·6	94·4	80·9	95·0	68·5	87·4	91·1	80·6
Dispensaries ...	16	96·8	64·9	84·6	63·7	100·0	90·9	77·4	65·8	94·1
Medical subordinates ...	5,477	72·7	73·1	77·6	77·0	85·7	69·6	73·1	77·1	69·9
Total ...	1,462,886	89·7	77·2	88·4	79·0	91·8	80·5	88·6	87·7	90·9

An advance is noticeable in the percentage of success both under primary and re-vaccinations during the year under report. The advance of 3·4 per cent. under primary vaccination is particularly noteworthy. Compared with 1912–13, the following districts show an increase in infantile vaccination :—

Madura (10·2), Coimbatore (8·2), South Arcot (7·4) and the Nilgiris (5·5).

G. The cost of the various establishments and the average cost of each successful case during the previous three years are shown below :—

Establishment.	Total expenditure.			Average cost of each successful case.		
	1911–12.	1912–13.	1913–14.	1911–12.	1912–13.	1913–14.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A P.	RS. A. P.
Government establishment...	4,588 8 6	7,460 15 8	7,392 12 3	0 6 5	0 8 2	0 6 4
Local Fund do. ...	2,74,283 9 1	2,82,675 8 2	2,88,231 5 11	0 3 8	0 3 10	0 3 7
Municipal do. ...	35,031 3 11	35,291 7 2	39,068 13 11	0 4 3	0 4 7	0 4 8
Cantonment do. ...	2,655 12 5	2,913 15 8	2,992 12 7	0 5 9	0 7 10	0 5 3
Total ...	* 3,16,559 1 11	* 3,28,341 14 8	3,37,685 12 8†	0 3 9	0 3 11	0 3 8

* Exclusive of the pay and allowances of the Inspector of Vaccination and Deputy Sanitary Commissioner, Madras.
† Exclusive of the pay and allowances of the Inspector of Vaccination and Deputy Sanitary Commissioner, Central and Northern Ranges.

The average cost of each successful case declined from As. 3–9 and As. 3–11 in 1911–12 and 1912–13, respectively, to As. 3–8 in the year under report. Excluding the hill tracts where conditions are peculiar, the average cost of

each successful case in no district exceeded As. 5. The only district which showed this rate was Cuddapah. The cost was at its minimum (As. 2–5) in the districts of Guntūr, Malabar and Tinnevelly. The rate was above As. 7 in the municipalities of Cocanada, Coonoor, Kodaikanal, Madras and Tiruppattūr. The minimum cost was As. 1–8 in Guntūr municipality.

H. 152,809 operations were performed in municipalities during the year against 146,692 in 1912–13 and 160,567 in 1911–12. Guntūr (+ 7,954), Tuticorin (+ 1,739), Bezwada (+ 1,218) and Ellore (+ 1,034) showed the largest increases. The towns that showed marked decreases were Cocanada (—6,755) and Madras (— 2,288). In Cocanada, the decrease was due to the discontinuance of vaccination of passengers arriving from Rangoon. In Madras it is attributed to the "reorganization of this department of the Corporation in August 1913." How this reorganization affected the number of vaccinations I am at a loss to understand!

I. The comparative success obtained by the use of different kinds of lymph in *primary* vaccination is shown in the subjoined table:—

Number of cases excluding unknown.	Area.	Method.	Whence obtained.	Percentage of success.
1,355,189	Local Fund ...	Lanoline lymph ...	Supplied by the King Institute of Preventive Medicine, Guindy.	91·5
...	Do. ...	Glycerine lymph ...	Do.	...
91,076	Municipalities ...	Lanoline lymph ...	Do.	95·2
20,332	Do. ...	Glycerine lymph ...	Do.	98·1

During the year under report the percentage of success from lanoline lymph rose from 88·0 to 91·5 in local fund areas and from 92·7 to 95·2 in municipalities. Glycerinated lymph yielded a success rate of 98·1 against 95·1 in 1912–13.

J. The number of deaths from small-pox during 1913–14 we re20,353 against 13,535 in 1912–13 and 19,198 in 1911–12. The proportion of population protected in the districts and municipalities during the year is shown in the annexed two diagrams.

K. Six Deputy Inspectors of Vaccination [of Calicut (49·6), Penukonda (49·0), Guntūr (47·0), Mallappuram (47·2), Hoswr (47·0) and Central Coimbatore (43·8)] failed to verify 50 per cent. of cases vaccinated within their ranges. Satisfactory explanations have, however, been rendered for this short verification work by the officers concerned.

L. Of the 85 Deputy Inspectors of Vaccination borne on the provincial list in the Presidency, 78 were qualified or certificated sanitary inspectors. One Deputy Inspector of Vaccination retired from the service during the year. Five Deputy Inspectors were fined for carelessness and similar offences. The service registers of all the Deputy Inspectors of Vaccination have been verified.

3. The delay in the submission of this report is regretted. The annual returns of one Deputy Inspector of Vaccination (of Ponnēri in Chingleput district) reached this office only on 23rd July 1914. It was only on receipt of this that consolidation of all the annual statements that are to be appended to the district had to be undertaken. This entailed some necessary delay in this office. The conduct of the Deputy Inspector of Vaccination on whose account the submission of the report was delayed is under separate enquiry.

I have the honour to be,
Sir,
Your most obedient servant.

W. A. JUSTICE, Major, I.M.S.,
Sanitary Commissioner for Madras.

ANNEXURE I.

ANNUAL REPORT ON THE WORK OF THE VACCINE SECTION OF THE KING INSTITUTE OF PREVENTIVE MEDICINE, GUINDY.

1913—1914.

The total amount of vaccine supplied by the Institute during the year under report amounts to 1,972,165 cases which is 84,526 cases more than in 1912-13. A reference to last year's report shows that the supply for that year fell short of the estimated amount by 77,000 cases. So it will be seen that last year's deficit has been more than made good. The total for this year is in fact the highest total ever issued since the Institute was opened, but the advance over the year 1908-09 is so small that it may be doubted whether the total requirements will ever much exceed two million cases.

Table I shows the quantity of vaccine issued to various bodies for the quinquennium 1909-10—1913-14.

TABLE I.

Table showing the quantity of vaccine supplied to various bodies from 1909-10 *to* 1913-14.

To whom supplied.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
Government officers including jails ...	36,860	58,086	46,722	41,902	47,172
Agency Tracts	28,055	27,830	25,160	27,130	23,150
Military Department	15,032	13,369	15,917	12,333	27,587
District Boards	1,642,497	1,522,650	1,561,366	1,560,341	1,625,926
Municipalities	171,760	179,034	177,185	173,255	179,330
Private Bodies	55,542	52,688	47,151	72,678	69,000
Total ...	1,949,746	1,853,657	1,873,501	1,887,639	1,972,165

As in past years the fluctuations are greatest in the smaller amounts supplied, and these show a variation from—15 per cent. in the case of the amount supplied to Agency Tracts, to+124 per cent. in the case of the amount supplied to the Military Department. The overall increase is approximately 5 per cent. and the increase in the amount supplied to District Boards, the main item of supply, is 4·2 per cent.

As usual, the bulk of the material issued was lanolinated vaccine; but Madras City and Colombo continued to take glycerinated vaccine.

The system of fortnightly dispatches was continued in the main; but in certain of the "trial scheme" areas, Chingleput and parts of North and South Arcot, dispatches three times a month were commenced. It is not possible to say whether the new system resulted in any improvement, since the results shown by circles are not yet available. Chingleput, as a whole, and it was wholly supplied on the new system for four months, shows a marked improvement; but Coimbatore, which was not so supplied, shows one nearly as great.

Fortnightly returns continued to be made with considerable irregularity and returns, a year overdue, were not unknown. It is apparently very difficult for vaccinators to get themselves out of the groove of habit. They still continue to send, in the main, fortnightly returns, when monthly returns through their Deputy Inspectors of Vaccination are all that is called for.

The extra supplies sent out to Districts and Municipalities amounted to 14·25 per cent. of their regular supplies which is a larger proportion than last year.

Table II.

Statement showing the expenditure incurred during the year 1913–14 under all heads of expenditure of the Vaccine Section of the King Institute of Preventive Medicine, Guindy.

Detailed heads of account.	Amount. RS.	A.	P.
Establishment Charges—			
Assistant Director	11,701	3	1
Clerks and Servants	6,912	6	2
Deputy Inspectors	4,136	14	1
Famine Batta	265	5	1
Travelling allowance of Officers, Deputy Inspectors and Establishment	525	14	6
Total establishment ...	23,541	10	11
Supplies, Services and Contingencies—			
Purchase of stores, apparatus	5,483	13	7
Cost of boxes and receptacles for vaccine	907	2	10
Cost of calves including transport	17,491	8	0
Feeding charges of calves	1,936	10	8
Water works	252	15	3
Gas works	166	15	3
Purchase and repair of furniture	149	13	0
Hot and cold weather charges	73	1	10
Tour charges	31	5	0
Cleaning charges	85	8	0
Service postage and telegram charges	2,578	10	0
Telephone charges	77	8	0
Office expenses	694	13	0
Miscellaneous	143	0	0
Pay of menials	2,368	13	1
Total supplies, services and contingencies ...	32,441	9	6
Proportionate cost of stationery supplied for 1913–14	172	8	3
Cost of clothing supplied	56	5	7
Cost of repairs to vaccine section buildings for 1913–14 as per statement furnished by the Executive Engineer, South Presidency Division, No. 1268-M., dated 9th May 1914 ...	1,514	12	8
Add Rs. 4–14–7 being the amount deducted in excess in the cost statement for 1912–13.—*Vide* letter No. 1010/V., dated 3rd April 1914	4	14	7
Total cost of stationery, clothing, repairs, etc. ...	1,748	9	1
Grand total, Vaccine section ...	57,731	13	6

Table III.

Statement showing the net expenditure incurred during the year 1913–14 in the King Institute of Preventive Medicine, Guindy, Vaccine Section.

Particulars.	RS.	A.	P.	Amount. RS.	A.	P.
Gross expenditure as per Table No. II.	...			57,731	13	6
Deduct—						
(1) Credits under sale of calves and miscellaneous receipts remitted to Treasury ...	4,506	5	7			
(2) Cost of vaccine supplied to private bodies during the year	4,312	8	0	8,818	13	7
Net total expenditure ...				48,912	15	11

TABLE IV.

Statement showing the number of cases for which vaccine was despatched to different bodies—Private bodies being excluded—during the year 1913–14.

To whom supplied.	Number of cases for which vaccine was supplied.	Rate per case	Total amount debitable. RS. A. P.
1. Government officers including jails	47,172	4·840069 pies.	* 1,199 8 4
2. Agency Tracts	23,150		† 605 3 4
3. Military Department	27,587		695 6 11
4. District Boards	1,625,926		‡ 41,828 2 6
5. Municipalities	179,330		§ 4,584 10 10
	1,903,1[illegible]5		48,912 15 11

		Rs.	A.	P.	
*	Includes	10	6	0	for registering vaccine packets.
†	,, ,,	21	10	0	,, ,,
‡	,, ,,	840	11	0	,, ,,
§	,, ,,	64	0	0	,, ,,
		936	11	0	

N.B.—In calculating the cost per case of vaccine, Rs. 936–11–0 has been deducted from Rs. 48,912–15–11 as the former represents registration charges and it will be charged to the bodies concerned.

As will be seen from tables II, III and IV there has been an increase of rather over Rs. 2,000 in the working costs. This increase is mainly due to higher establishment charges. The net cost has been farther increased by a drop of about Rs. 700 in the sums credited to Government. This has resulted in a small rise amounting to 0·07 pies per case in the cost of the vaccine, which stands for the year at 4·840069 pies per case.

TABLE V.

Returns recorded in the King Institute from the whole of the Madras Presidency according to the month of the year.

Serial number.	Months.	Number successful.	Number unsuccessful.	Percentage of success.
	1913.			
1	April	91,464	13,376	87·24
2	May	97,759	15,786	86·09
3	June	89,394	20,138	81·61
4	July	98,853	14,151	87·47
5	August	102,825	10,748	90·53
6	September	109,219	9,353	92·10
7	October	112,140	7,372	93·83
8	November	120,157	4,778	96·17
9	December	118,045	7,807	93·79
	1914.			
10	January	122,880	6,079	95·28
11	February	124,478	4,694	96·36
12	March	128,317	5,727	95·72
	Total ...	1,315,531	120,012	91·63

Table V shows the success rate obtained monthwar. It is gratifying to be able to record an overall improvement of close on 3·6 per cent. over last year.

The temperature effect is more regular this year but is a month later. Thus June is the worst month of the year while February is the best. May 1913 made a most remarkable recovery and stands nearly 7 per cent. better than in 1912. The success rate then drops sharply to its minimum in June and thence rises steadily till November. There is therefore no sign of the autumnal fall which has been a

feature in this table for some years back. Just what caused the fall in December 1913 it is difficult to say. Usually the figures go on at this season rising steadily to a maximum, but the fall was only moderate in amount and of short duration as by January there was an almost complete recovery, and February, with the actual maximum for the year, is 1·1 per cent. above last year's figure *plus* the annual overall improvement. This improvement was more than maintained into March which usually begins to show signs of the hot weather drop.

TABLE VI.

Returns recorded in the King Institute from the whole of the Madras Presidency, according to districts, 1913-14.

Serial number.	Districts.	Total successful.	Total unsuccessful.	Percentage of success.
1	Anantapur...	25,424	1,504	94·41
2	Bellary	33,897	837	97·59
3	Chingleput	34,102	6,659	83·66
4	Chittoor	31,550	2,720	92·06
5	Coimbatore	58,241	15,550	78·92
6	Cuddapah	32,378	2,708	92·28
7	Ganjām	75,131	3,900	95·06
8	Gōdāvari	58,919	10,686	84·64
9	Guntur	56,410	5,474	91·15
10	Kistna	79,273	6,081	92·87
11	Kurnool	32,900	1,138	96·65
12	Madura	48,249	7,841	86·02
13	Malabar	143,655	12,629	91·91
14	Nellore	38,300	4,599	89·27
15	Nilgiris	4,743	109	97·75
16	North Arcot	54,457	6,390	89·49
17	Rāmnād	54,296	1,240	97·76
18	Salem	62,504	3,949	94·05
19	South Arcot	64,305	8,345	88·51
20	South Canara	38,834	2,526	93·89
21	Tanjore	62,538	2,108	96·73
22	Tinnevelly	62,526	3,259	95·04
23	Trichinopoly	63,955	3,438	94·89
24	Vizagapatam	98,944	6,322	93·99
	Total	1,315,531	120,012	91·63

Table VI gives the results obtained according to districts. The figures show some notable points, and it will be seen that a relationship noted in a previous report when there was a fall in the success rate, namely, that bad districts were more influenced than good ones, is maintained when there is a rise in the success rate. Thus the three districts of Coimbatore, Chingleput and Madura which footed the list last year show percentage improvements of 13·4, 13·8 and 11·8, respectively, over last year's, which are much in excess of any of the others. Slight falls are shown by Kurnool, the Nilgiris, Anantapur and Cuddapah. The last two of these are quite out of the common, as they were not particularly good last year and should have shown a slight rise.

TABLE VII.

Statement showing the percentage of success obtained in certain districts selected for comparison in each of the last five years.

Serial number.	Districts.	1909–10.	1910–11.	1911–12.	1912–13.	1913–14.	Average
1	Bellary	97·86	96·51	97·65	96·48	97·59	97·21
2	Anantapur	96·80	94·86	95·23	95·45	94·41	95·35
3	Kurnool	95·42	96·20	96·16	96·95	96·65	96·27
4	Gōdāvari	85·44	71·29	78·13	79·04	84·64	79·70
5	Coimbatore	81·17	75·54	75·74	69·59	78·92	76·19

Table VII is re-introduced this year, but for the quinquennium only. In spite of its notable improvement this year, Coimbatore still occupies the foot of the list and is very nearly 20 per cent. worse than Bellary over the whole five years. Farthermore unless it makes a still farther improvement next year, its position will be relatively worse, since the good effects of earlier years are being eliminated.

TABLE VIII.

Statement showing the percentage of success obtained in the different months of the year for five years and the average for each month during that time.

Serial number.	Months.	1909–10.	1910–11.	1911–12.	1912–13.	1913–14.	Average.
1	April	94·30	88·32	84·33	86·72	87·24	88·18
2	May	90·91	84·53	83·53	80·57	86·09	85·12
3	June	87 02	81·22	88·15	82·84	81·61	84·16
4	July	89·81	85·11	89·13	88·42	87·47	87·98
5	August	93·20	90·26	90·54	87·39	90·53	90·38
6	September	93·47	92·45	89·30	84·87	92·10	90·43
7	October	92·79	85·26	89·73	88·02	93·83	89·92
8	November	91·52	86·65	92·36	91·58	96·17	91 65
9	December	92·36	87·31	93·28	91·73	93·79	91·69
10	January	93 03	87·00	93·29	93·00	95·28	92·32
11	February	90·85	91·91	88·57	91·62	96·36	91·86
12	March	91·92	93·62	89·08	88·56	95·72	91·78

Table VIII has also been modified to include five years only. The great improvement in the success rate obtained in 1913 during the months of September and October, all but obliterate the autumnal variation noticed in the previous five years. It is still slightly in evidence however.

TABLE IX.

Statement showing the duration of storage of lanoline paste during the official year 1913–14.

Name of month.	Duration of storage, each month.	
	Minimum period.	Maximum period.
1913.		
April	17 weeks ...	19 weeks.
May	19 ,, ...	21 ,,
June	12 ,, ...	21½ ,,
July	1 day ...	14½ ,,
August	,, ...	33 ,,
September	5 weeks ...	8 ,,
October	2 days ...	10 ,,
November	1 week ...	14 ,,
December	6 weeks ...	15 ,,
1914.		
January	4 weeks ...	10½ weeks.
February	2 days ...	10½ ,,
March	1 day ...	4 ,,

Table IX shows that the maximum periods during which lanoline paste was stored were much longer than in the previous year, whereas the minimum periods were much shorter. As usual, the storage period was more constant during the summer months, when no vaccine was made. No dileterious effect of storage on the vaccine can be made out.

TABLE X.

Statement showing the duration of storage of glycerine paste during the official year 1913–14.

Name of month.	Duration of storage, each month	
	Minimum period.	Maximum period.
1913.		
April	3 weeks	6 weeks.
May	6 ,,	10 ,,
June	10 ,,	14 ,,
July	3 days	14 ,,
August	2 ,,	3 ,,
September	3 weeks	6 ,,
October	1 day	8 ,,
November	2½ weeks	5 ,,
December	3 ,,	6 ,,
1914.		
January	1 day	8 weeks.
February	10 weeks	13 ,,
March	1 day	8½ ,,

The periods during which glycerinated vaccine was stored ruled rather lower but were exceedingly irregular.

The immediate working of the section was in the hands of Captain F. W. Cragg, I.M.S., from 1st April to 14th July 1913 and for the rest of the year in those of the Assistant Director Captain W. S. Patton, I.M.S. Captain Patton contributes an interesting appendix dealing with a statistical enquiry into certain working data of the Institute for the last ten years. Attention is drawn in this appendix to certain improvements of procedure, notable among which are—

(1) The selection of lymph for seed purposes from a large number of animals vaccinated in the ordinary way. This is entirely in accordance with the practice at the Government Lymph Establishment at Hendon, London, and has quite superseded the vaccination of special stock animals.

(2) The three-line method of insertion. This certainly does seem a better procedure for the class of animal and the climate we have to deal with.

(3) If the reputed improvement in stock lymph when kept in the form of unground and unmixed pulp is maintained a farther notable advance will have been made in our technique.

Regarding the proposed depot for reserve calves in the Salem district, the difficulties of proper supervision at such a distance, the unlikelihood that the site can be kept free for any length of time from epidemic disease and the final refusal of the Railway authorities to guarantee fast through passages, robs the scheme of all the advantages it was supposed to possess. The possibility of keeping a large reserve of vaccine in the cold store, the steady working of which can now be depended upon, is an additional circumstance rendering the scheme less necessary. I would therefore recommend the abandonment of the scheme and this would of course involve the simultaneous abandonment of the depot for done calves in the Chingleput district.

There has been a more than ample supply of very fairly good calves, and the scheme whereby each contractor, on receiving payment for his calves, deposits the re-purchase value of them at a fixed rate continues to work well and give satisfaction.

The usual vaccination class was held during March. Thirty students attended and all received qualifying marks in the examination held at the end of the course.

THE KING INSTITUTE, GUINDY,
11th June 1914.

F. MAITLAND GIBSON, M.B., B.SC.,
Director.

ENCLOSURE.

Some observations on the production of cow-pox vaccine at The King Institute as shown by the statistics during the last decade by Captain W. S. Patton, M.B., I.M.S.

As I have had the opportunity of observing the methods of making the cow-pox vaccine at this Institute from August 1905 with intervals during which I was on leave or on special duty up to the present time, it will, I think, be of some value and also of considerable interest to examine the statistics for the ten years 1904 to 1914. Unfortunately the figures for the earlier years are incomplete and those for 1906 were either not kept or have been lost. During the earlier years—to be exact from February 1904 to July 1907—stock calves were used to maintain the strain and the lymph obtained from these was transferred directly to the animals used for the production of the lanoline lymph. As the number of calves required to meet the increasing demand for vaccine increased, it was found expedient to mix the lymph from the stock animals with glycerine in order to obtain sufficient seed to vaccinate the larger number of calves. The stock calves were selected out of those brought by the contractors; they were kept separate and given a special diet. In 1907 the use of stock calves was given up by Major Christophers, I.M.S., the then Director, for the main reason that it was considered a wasteful method of maintaining the strain. Instead the animals showing the best vesicles among the paste calves were selected during the day's inspection and the lymph so obtained was mixed with glycerine and used for the manufacture of the lymph required for the issue to the vaccinators of the Presidency. Up to the middle of 1909 the glycerinated lymph was inserted on the paste calves in single lines but from this period it was inserted in groups of triple lines of 30 to 35 such groups according to the size of the animal. The following tables bring out some of the main points bearing on the production of cow-pox vaccine during the years 1904 to 1914.

TABLE I.

Average yield of pulp per calf according to the months of the year.

—	Grammes.	Maximum.	Minimum.
January	4·4	7·8	2·8
February	3·9	6·5	2·2
March	4·2	6·9	2·6
April	3·9	6·9	2·2
May	3·6	6·9	2·3
June	2·6	6·0	2·1
July	4·3	8·2	2·1
August	4·7	7·3	3·0
September	4·1	5·7	2·8
October	4·2	5·4	2·8
November	4·3	6·0	2·8
December	4·4	7·9	2·8

Table I shows the average yield of lymph according to the months of the year, and it will be seen that although many of the calves produce excellent vesicles judging from the maximum yield during the months of April, May and June, the average is distinctly low. This is a clear indication that these months of the year are not favourable for the production of cow-pox vaccine. During these months the vesicles are smaller, mature more rapidly and then tend to dry up.

According to the available statistics 17,987 calves have been used during the period under review, and the average production of lymph per calf works out at 4·1 grammes.

TABLE II.

Average yield of lymph per calf according to years.

Year.	Grammes.
1904	4·9 The records are incomplete, this figure would be lower.
1905	3·5
1906	No records.
1907	3·2
1908	2·8
1909	3·7
1910	5·1
1911	5·3
1912	5·9
1913	5·3

This table is of interest for it clearly shows that more lymph has been obtained per calf during the last four years than during the earlier ones. The reason for this is twofold. In the first place the improved technique of inserting the seed lymph in groups of triple lines results in the formation of larger and healthier vesicles; there is a greater flow of blood to the parts and a better re-action, and the vesicles run together to form a uniform layer of lymph. In the case of the single lines in the majority of the animals the vesicles remain small, and there is a marked tendency for them to mature and dry up between 72 and 86 hours. The second reason for the better results is due to the routine practice which I introduced in 1911, and which has since been continued, of vaccinating a larger number of calves simultaneously, ten in the morning and ten in the afternoon. The vesicles mature about the same time, and the observer has a wide margin from which to select the seed for the next batch of calves. In a very short time the eye becomes accustomed to the type of vesicle which gives the best results. The strain is rapidly passed through a large number of calves which are, as far as possible, never kept for long periods at the Institute (only on an average five to six days); the seed lymph except during intervals when vaccination is stopped is never kept for long periods. Calves kept for any length of time at the Institute soon begin to deteriorate; there is practically no fresh grazing to be had; they become infested with the calf louse, *Haematopinus vituli*, Enderlein, and latterly have developed a fungus disease of the skin simulating acariasis. Calves so infested with lice and the skin disease are unsuitable for purposes of vaccination.

Latterly the technique of using the seed lymph has been further improved. If it is not to be used immediately it is without any further treatment placed in a sterile petri dish and stored in the cold room. When required it is pulped and mixed either with glycerine or with sterile saline solution, and then used for vaccinating the calves. Fivehundred and eighty-one calves were vaccinated in this way during the months of February and March 1914 and 5,413·4 grammes were collected from them, each calf yielding on an average 9·31 grammes. All the vesicles were well formed and typical; the lymph produced normal vesicles on children vaccinated at Saidapet.

After a long series of passages through the calf the organism (?) of vaccinia becomes attenuated. This has long been recognised, and a recent observer has again drawn attention to the fact that the donkey is the best animal for exalting the virus; unfortunately this animal is most difficult to procure locally. Failing this it has been found best to introduce the seed from different parts of the country and select the one which gives the best results. The rapid passage through a large number of healthy calves at definite periods of the year, especially avoiding the hot months of April, May and June, storing several good masses of vesicles in the semi-dry state for very short periods, pulping and mixing these either with glycerine or sterile saline solution is the routine technique now employed.

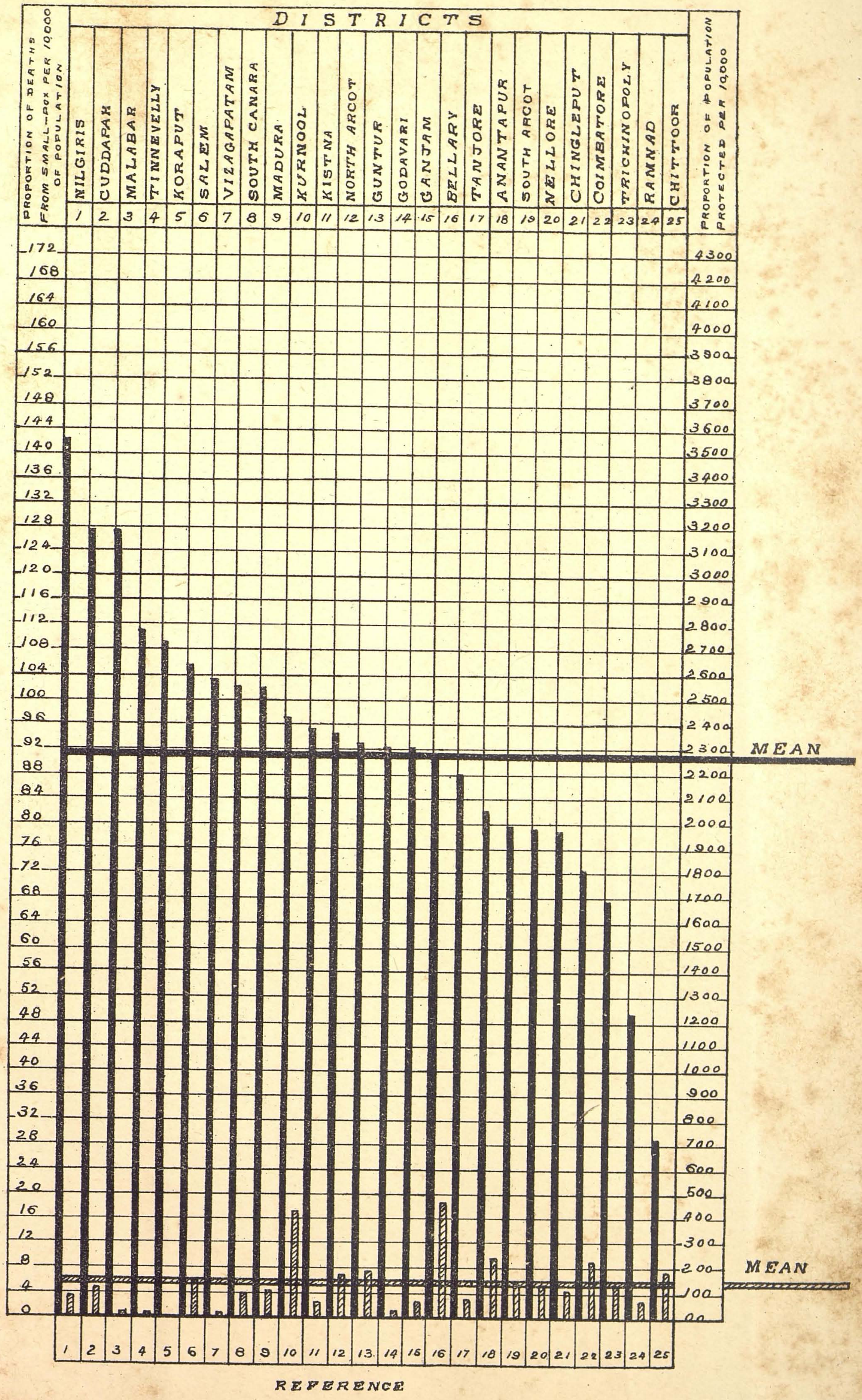
It is interesting to note that about 6 per cent. of the calves are rejected as failures, *i.e.*, either no vesicles have formed at the site of vaccination or only a few abortive ones. I believe that at least some of these animals have already had vaccinia and are either wholly or partially protected. The success rate in calves works out at 94 per cent. If a proportion of calves (6 per cent.), which are vaccinated with seed of a known potency and which give excellent results on several other animals vaccinated at the same time and over a comparatively enormous area of skin, fail to take, how much more is it likely that a proportion of children vaccinated over a comparatively small area of skin and often under most unfavourable circumstances will fail to take, or take badly. If the success rate in calves is 94 per cent. one can hardly expect it to be higher in children unless they are vaccinated with the greatest care and all precautions are taken to see that the vaccinated areas are not interfered with; this is in many cases impossible in the case of village children.

A perusal of the figures I have quoted lends no support to the view I have heard expressed that better cow-pox vaccine was obtained in the earlier years of the work of the vaccine section than during the later years. I have no hesitation in saying that the vesicles produced as the result of triple lines are better than those from single lines.

I have no opportunity of judging of the potency of the lymph as a protective agent against small-pox in man; the potency of the lymph is judged by its behaviour on calves. I freely admit that the character of the vesicles and their abundance on the calves may have no connection with the potency of the lymph as a protective agent against small-pox, but here we enter the region of speculation.

Lastly it is of some interest to note that the number of calves used for the production of cow-pox vaccine is now much less than before and yet the full amount of pulp is issued. The supply of calves appears to be unlimited and the contractors have recently been complaining that owing to the decrease in the number of calves used they do not find the business remunerative; whether this is the case or not it is impossible to form an opinion. They are well deserving of every support for with very few exceptions the calves they bring are in excellent condition.

The elaboration of these various data has thrown extra work on the Deputy Inspectors of Vaccination which they have cheerfully carried out, and I am satisfied with the way they and the vaccine staff generally have acquitted themselves in the discharge of their duties.



THICK BLACK LINES REPRESENT THE PROPORTION PER 10,000 PROTECTED FROM SMALL-POX

SHADED LINES REPRESENT THE PROPORTION OF DEATHS FROM SMALL-POX PER 10,000 OF POPULATION

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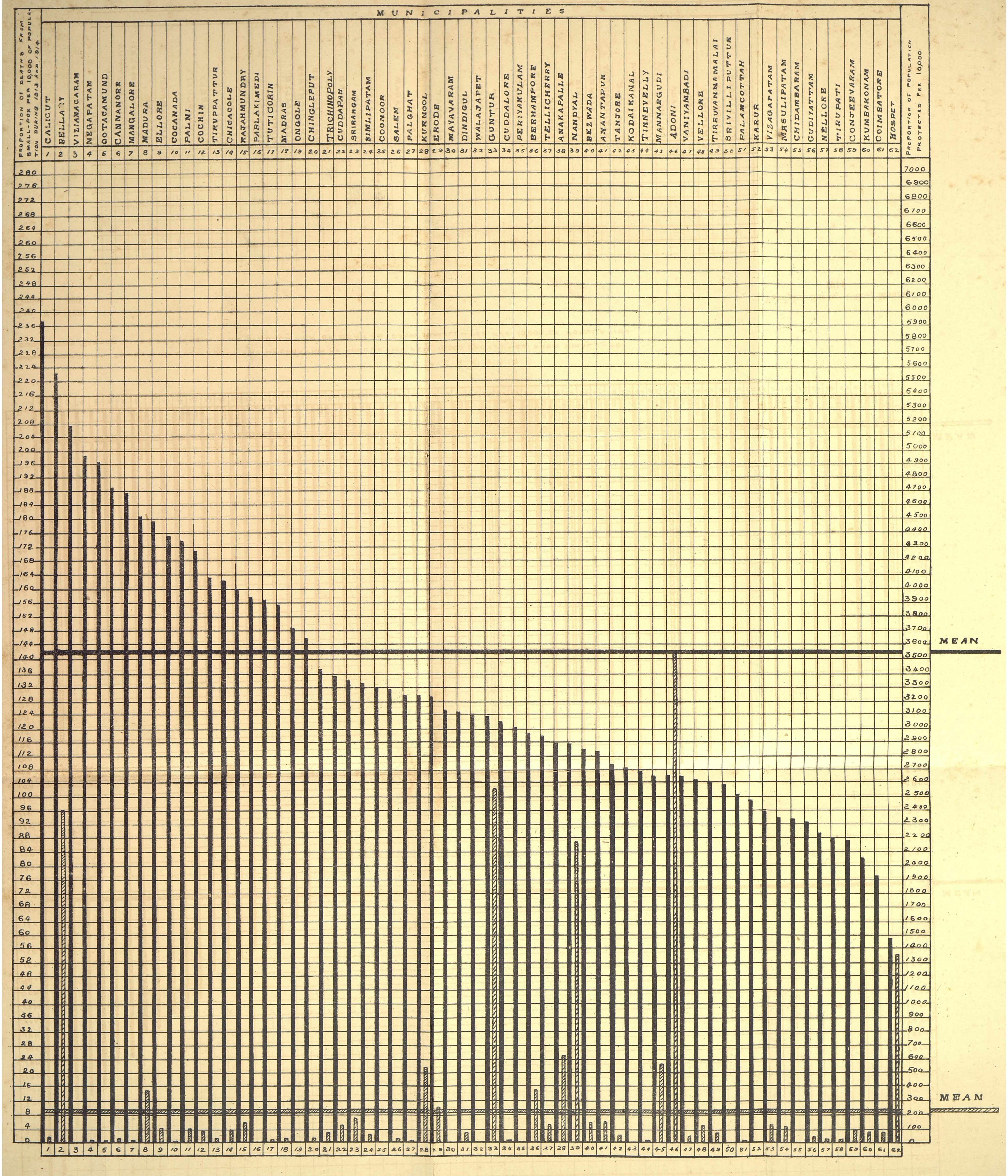
1914



REFERENCE

THICK BLACK LINES REPRESENT THE PROPORTION OF POPULATION PER 10,000 PROTECTED FROM SMALL-POX

SHADED LINES REPRESENT THE PROPORTION OF DEATHS FROM SMALL-POX PER 10,000 OF POPULATION

Reg: No. 1133
Copies 420

Vandyke, Survey Office, Madras.
1914

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing the Particulars of Vaccination in the Madras Presidency for the official year 1913–14.*

Number.	Districts.	Circles.	Population of districts or circles according to the census of 1911.	Average population per square mile.	Average number of vaccinators employed throughout the year.	Total number of persons vaccinated. Males.	Females.	Total.	Average number of persons vaccinated by each vaccinator.	Primary vaccination. Total number of operations.	Under 1 year.
1	2	3	4	5	6	7			8	9	10
1	Anantapur.	Anantapur circle ...	444,221	135	7	7,183	6,651	13,834	1,976	13,652	7,859
2		Penukonda do. ...	510,545	119	11	8,008	7,204	15,212	1,383	15,356	7,713
		Total of district ...	954,766	142	18	15,191	13,855	29,046	1,614	29,008	15,572
3	Bellary.	Bellary circle	885,164	156	10	8,346	7,706	16,052	1,605	16,514	9,475
4		Hospet do.			10	7,560	6,645	14,205	1,420	13,852	9,158
		Total of district ...	* 885,164	156	20	15,906	14,351	30,257	1,513	30,366	18,633
5	Chingleput.	Chingleput circle ...	1,340,518	436	4	8,321	8,083	16,404	4,101	17,305	9,123
6		Saidapet do. ...			4	7,943	7,697	15,640	3,910	15,533	4,618
7		Ponnēri do. ...			4	8,058	7,640	15,698	3,924	15,343	7,728
		Total of district ...	1,340,518	436	12	24,322	23,420	47,742	3,978	48,181	21,469
8	Chittoor.	Chittoor circle ...	528,016	194	10	7,514	6,702	14,216	1,422	13,931	5,289
9		Karvetnagar do. ...	694,025	234	12	9,827	9,589	19,416	1,618	19,828	7,988
		Total of district ...	1,222,041	215	22	17,341	16,291	33,632	1,529	33,759	13,277
10	Coimbatore.	North Coimbatore circle.	489,392	165	8	8,916	8,506	17,422	2,178	17,388	5,739
11		East do. do.	554,719	383	9	13,121	12,405	25,526	2,837	23,382	7,723
12		South do. do.	367,884	211	7	6,384	6,173	12,557	1,794	11,926	5,261
13		Central do. do.	640,861	414	9	10,666	10,458	21,124	2,347	21,372	8,065
		Total of district ...	2,052,856	266	33	39,087	37,542	76,629	2,322	74,068	26,788
14	Cuddapah.	Cuddapah circle ...	303,660	137	9	5,673	4,628	10,301	1,145	11,208	5,044
15		Proddatur do. ...	267,072	198	7	4,942	4,506	9,448	1,350	10,327	4,646
16		Sidhout do. ...	305,459	131	8	6,671	5,541	12,212	1,526	12,952	6,310
		Total of district ...	876,191	148	24	17,286	14,675	31,961	1,332	34,487	16,000
17	Ganjām.	Berhampur circle ...	2,153,614	257	9	77,30	7,412	15,142	1,683	15,194	7,434
18		Chicacole do. ...			9	6,656	6,585	13,241	1,471	12,930	6,992
19		Ganjām Hill tracts ...			15	7,693	6,949	14,642	976	14,349	2,840
20		Aska circle			8	7,027	6,106	13,133	1,642	12,610	3,683
21		Parlākimedi circle ...			7	6,481	6,033	12,514	1,788	12,128	4,715
22		Purushottapur circle ...			8	6,471	5,423	11,894	1,487	11,627	4,681
		Total of district ...	† 2,153,614	257	56	42,058	38,508	80,566	1,439	78,838	30,345
23	Gōdāvari.	Cocanada circle ...	341,838	249	7	7,319	6,855	14,174	2,025	14,135	3,938
24		Rajahmundry do. ...	574,472		9	12,472	11,146	23,618	2,624	23,027	4,195
25		Polavaram do. ...	130,992		6	3,489	3,299	6,788	1,131	7,032	2,276
26		Peddapur do. ...	427,120		10	10,031	9,223	19,254	1,925	18,435	7,822
27		Bhadrāchalam do. ...	75,910		3	2,122	1,843	3,965	1,322	4,021	1,039
		Total of district ...	† 1,550,332	249	35	35,433	32,366	67,799	1,937	66,650	19,270

* Excludes Sandur (13,526).

† Includes Hill Tracts.

Number.	Primary vaccination. Successful. 1 and under 6 years.	Total of all ages.	Unknown.	Re-vaccination. Total number of operations.	Successful.	Unknown.	Percentage of successful cases in which the results were known. Primary vaccination.	Re-vaccination.	Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases. Primary vaccination.	Re-vaccination.	Average number of persons successfully vaccinated during previous 5 years. Number.	Ratio.	Average number of deaths from small-pox during previous 5 years. Number.	Ratio.
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	5,095	13,243	73	544	487	27	97·5	94·2	30·9	0·5	5·0	...	...	...	...
2	5,402	13,575	315	670	560	11	90·3	85·0	27·7	2·1	1·6				
Total	10,497	26,818	388	1,214	1,047	38	93·7	89·0	29·2	1·3	3·1	27,557	28·9	137	0·1
3	5,799	16,146	39	269	248	2	98·0	92·9	33·9	0·2	0.7	...	...	...	...
4	4,349	13,616	46	632	617	4	98·6	95·2		0·3	0·6				
Total	10,148	29,762	85	901	865	6	98·3	96·6	33·9	0·3	0·7	29,000	32·1	734	0·8
5	40,20	13,352	1,848	542	318	75	86·4	68·1	27·0	10·7	13·8	...	...	...	...
6	3,668	10,913	2,337	377	155	10	82·7	42·2		15·0	2·7				
7	3,205	11,277	2,020	632	199	179	84·6	43 9		13·2	28·3				
Total	10,893	35,542	6,205	1,551	672	264	84·7	52·2	27·0	12·9	17·0	38,498	28·7	439	0·3
8	6,106	11,929	502	987	452	224	88·8	59·2	23·4	3·6	22·7	...	...	...	...
9	9,793	18,226	385	284	186	63	93·7	84·2	26·5	1·9	22·2				
Total	15,899	30,155	887	1,271	638	287	91·7	64·8	25·2	2·6	22·6	27,864	22·8	501	0·4
10	5,730	11,857	1,068	910	365	176	72·7	49·7	25·0	6·1	19·3	...	...	...	...
11	7,856	16,045	2,124	3,189	1,300	601	75·5	50·2	31·3	9·1	18·8				
12	4,390	9,854	395	693	480	72	85·5	77·3	28·1	3·3	10·4				
13	7,413	15,680	1,210	539	248	67	77·8	52 5	24·9	5·7	12·4				
Total	25,389	53,436	4,797	5,331	2,393	916	77·1	54·2	27·2	6·5	17·2	50,963	24·8	1,313	0·6
14	4,072	9,538	329	131	86	5	87·7	68·3	31·7	2·9	3·8	...	...	...	...
15	4,126	9,665	192	175	155	5	95·4	91·2	36·8	1·9	2·9				
16	4,876	11,997	261	275	243	10	94·5	91·7	40·1	2·0	3·6				
Total	13,074	31,200	782	581	484	20	92·6	86·3	36·2	2·3	3·4	58,937	67·3	537	0·6
17	6,302	14,188	358	92	78	7	95·6	91·8	35·3	2·4	7·6	...	...	...	...
18	4,612	11,912	528	428	337	53	96·0	89·9		4·1	12·4				
19	7,683	13,489	170	1,616	1,501	10	95·1	93·5		1·2	0·6				
20	6,782	11,090	492	704	625	28	91·5	92·5		3·9	4·0				
21	5,914	11,202	442	640	503	80	95·9	89·8		3·6	12·5				
22	5,306	10,593	475	531	484	22	95·0	95·1		4·1	4·1				
Total	36,599	72,474	2,465	4,011	3,528	200	94·9	92·6	35·3	3·1	5·0	69,977	32·5	574	0·3
23	7,132	11,935	512	384	212	57	87·6	64·8	35·5	3·6	14·8	...	...	...	...
24	11,684	17,497	1,722	1,156	422	293	82·1	48·9	31·2	7·5	25·3				
25	3,004	5,732	178	157	88	29	83·6	68·7	44·4	2·5	18·5				
26	6,353	15,271	673	2,487	2,014	141	86·0	85·8	40·5	3·7	5·7				
27	1,612	2,955	152	159	96	20	76·4	69·1	40·2	3·8	12·6				
Total	29,785	53,390	3,237	4,343	2,832	540	84·2	74·5	36·3	4·9	12·4	49,440	31·9	647	0·4

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing the Particulars of Vaccination in the Madras Presidency for the official year 1913-14*—continued.

Number.	Districts.	Circles.	Population of districts or circles according to the census of 1911.	Average population per square mile.	Average number of vaccinators employed throughout the year.	Total number of persons vaccinated. Males.	Females.	Total.	Average number of persons vaccinated by each vaccinator.	Primary vaccination. Total number of operations.	Under 1 year.
1	2	3	4	5	6	7			8	9	10
28	Guntūr.	Guntūr circle	1,625,541	283	10	15,429	13,247	28,676	2,868	23,031	8,783
29		Narasaraopet circle ...			10	13,291	9,840	23,131	2,313	16,716	6,245
30		Bāpatla do. ...			11	13,618	12,231	25,849	2,350	21,762	8,356
		Total of district ...	1,625,541	283	31	42,338	35,318	77,656	2,505	61,509	23,384
31	Kistna.	Ellore circle	1,884,726	319	14	15,557	14,997	30,554	2,182	31,034	10,864
32		Masulipatam circle ...			14	12,913	12,146	25,059	1,790	25,151	9,658
33		Narasapur do. ...			12	12,081	11,484	23,565	1,964	24,816	7,570
		Total of district ...	1,884,726	319	40	40,551	38,627	79,178	1,979	81,001	28,092
34	Kurnool.	Cumbum circle	395,841	118	12	8,496	7,002	15,498	1,291	14,137	5,922
35		Kurnool do.	497,088	119	13	9,698	8,538	18,236	1,403	17,935	9,146
		Total of district ...	* 892,929	118	25	18,194	15,540	33,734	1,349	32,072	15,068
36	Madura.	Dindigul circle ...	1,738,818	354	4	9,565	9,228	18,793	4,698	19,772	9,758
37		Madura do. ...			4	9,623	8,507	18,130	4,532	17,727	6,575
38		Usilampatti do. ...			5	10,699	10,098	20,797	4,159	21,099	11,502
		Total of district ...	1,738,818	354	13	29,887	27,833	57,720	4,440	58,598	27,835
39	Malabar.	Tellicherry circle ...	2,809,117	485	11	16,050	13,878	29,928	2,721	28,513	6,021
40		Calicut do. ...			11	19,863	19,194	39,057	3,551	37,601	4,663
41		Palghat do. ...			12	23,320	22,545	45,865	3,822	45,016	10,572
42		Malappuram do. ...			11	18,951	17,543	36,494	3,318	35,978	6,107
		Total of district ...	† 2,809,117	485	45	78,184	73,160	151,344	3,363	147,108	27,363
43	Nellore.	Kāvali circle ...	1,294,906	162	8	8,013	6,842	14,855	1,857	15,158	5,406
44		Gudur do. ...			8	7,982	7,252	15,234	1,904	15,293	6,457
45		Kanigiri do ...			8	6,566	6,305	12,871	1,609	14,359	3,571
		Total of district ...	1,294,906	162	24	22,561	20,399	42,960	1,790	44,810	15,434
46	Nilgiris.	Nilgiri circle	89,856	89	3	2,407	1,943	4,350	1,450	3,946	1,366
		Total of district ...	89,856	89	3	2,407	1,943	4,350	14,50	3,946	1,366
47	North Arcot.	Vellore circle ...	1,825,742	371	3	6,700	6,618	13,318	4,439	14,659	8,459
48		Rānipēttai do. ...			3	7,275	6,888	14,163	4,721	15,380	6,335
49		Polur do. ...			3	6,217	5,996	12,213	4,071	14,508	4,704
50		Tiruppattūr do. ...			10	8,760	8,647	17,407	1,741	17,666	5,887
		Total of district ...	1,825,742	371	19	28,952	28,149	57,101	3,005	62,213	25,385
51	Rāmnād.	Srīvilliputtūr circle ...	1,629,387	337	9	8,960	8,282	17,242	1,916	17,212	8,185
52		Paramagudi do. ...			10	10,108	9,331	19,439	1,944	19,048	7,314
53		Tiruppattūr do. ...			11	9,616	9,160	18,776	1,707	18,451	5,791
		Total of district ...	1,629,387	337	30	28,684	26,773	55,457	1,849	54,711	21,280

Number.	Circles.	Primary vaccination. Successful. 1 and under 6 years.	Total of all ages.	Unknown.	Re-vaccination. Total number of operations.	Successful.	Unknown.	Percentage of successful cases in which the results were known. Primary vaccination.	Re-vaccination.	Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases. Primary vaccination.	Re-vaccination.	Average annual number of persons successfully vaccinated during previous 5 years. Number.	Ratio per 1,000.	Average annual number of deaths from small-pox during previous 5 years. Number.	Ratio per 1,000.
1	3	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
28	Guntūr circle	10,801	20,804	386	6,044	5,413	39	91·9	90·1	44·5	1·7	0·6	...	...	...	...
29	Narasaraopet circle	8,806	15,402	221	6,872	6,798	23	93·4	99·3		1·3	0·3				
30	Bāpatla do.	9,476	19,415	570	4,764	4,541	41	91·6	96·1		2·6	0·9				
	Total of district	29,083	55,621	1,177	17,680	16,752	103	92·2	95·3	44·5	1·9	0·6	52,535	32·2	719	0·4
31	Ellore circle	15,588	28,626	492	455	391	9	93·7	87·7	39·7	1·6	2·0	...	...	...	...
32	Masulipatam circle	11,895	22,998	435	567	511	19	93·0	93·2		1·7	3·3				
33	Narasapur do.	13,265	22,062	482	248	171	35	90·7	80·3		19·4	14·1				
	Total of district	40,748	73,686	1,409	1,270	1,073	63	92·6	88·9	39·7	1·7	5·0	59,213	31·4	722	0·4
34	Cumbum circle	6,680	13,592	96	1,946	1,750	61	96·8	92·8	38·8	0·7	3·1	...	...	...	...
35	Kurnool do.	7,442	17,332	126	609	507	24	97·3	86·7	35·9	0·7	3·9				
	Total of district	14,122	30,924	222	2,555	2,257	85	97·1	91·4	37·2	0·7	3·3	29,944	33·5	296	0·2
36	Dindigul circle	3,699	15,378	1,719	621	316	101	85·2	60·8	26·2	8·7	16·3	...	...	...	...
37	Madura do.	4,831	11,755	2,413	848	210	189	76·8	31·9		13·6	22·3				
38	Usilampatti do.	6,050	17,834	1,803	487	218	162	92·4	67·1		8·5	33·3				
	Total of district	14,580	44,967	5,935	1,956	744	452	85·4	49·5	26·3	10·1	23·1	58,818	33·8	729	0·4
39	Tellicherry circle	13,607	24,731	611	1,415	818	70	88·6	60·8	47·9	2·1	4·9	...	...	...	...
40	Calicut do.	20,221	34,998	573	1,481	738	37	94·5	51·1		1·5	2·5				
41	Palghat do.	22,868	39,766	1,147	1,037	717	113	90·6	77·6		2·5	10·9				
42	Malappuram do.	19,310	32,531	758	606	378	38	92·4	66·5		2·1	6·2				
	Total of district	76,006	132,026	3,089	4,539	2,651	258	91·7	61·9	47·9	2·1	5·7	127,978	45·6	1,652	0·6
43	Kāvali circle	6,360	13,217	664	654	433	84	91·2	76·0	30·7	4·4	12·8	...	...	...	...
44	Gudur do.	6,064	13,540	590	586	388	103	92·1	80·3		3·8	17·6				
45	Kanigiri do	7,167	11,705	538	718	489	66	84·7	75·0		3·7	9·2				
	Total of district	19,591	38,462	1,792	1,958	1,310	253	89·4	76·8	30·7	4·0	12·9	35,412	27·3	937	0·7
46	Nilgiri circle	1,990	3,857	4	417	393	...	97·8	94·2	47·3	0·1	...	...	...	...	...
	Total of district	1,990	3,857	4	417	393	...	97·8	94·2	47·3	0·1	...	4,753	52·9	18	0·2
47	Vellore circle	4,315	12,866	782	45	14	4	92·7	34·1	28·5	5·3	8·9	...	...	...	...
48	Rānipēttai do.	62,49	12,698	963	610	146	63	87·7	26·7		5·9	10·3				
49	Polur do.	5,636	10,635	1,435	283	78	93	81·4	41·1		9·9	32·9				
50	Tiruppattūr do.	9,022	15,466	1,036	399	202	101	93·0	67·8		5·9	25·3				
	Total of district	25,222	51,665	4,156	1,337	440	261	89·0	40·9	28·5	6·7	19·5	56,938	31·2	1,606	0·9
51	Srīvilliputtūr circle	7,292	16,378	345	268	245	16	97·1	97·2	33·1	2·0	6·0	...	...	...	...
52	Paramagudi do.	9,883	18,564	106	391	306	59	98·0	92·2		0·6	15·1				
53	Tiruppattūr do.	10,506	18,190	165	397	368	10	99·5	95·1		0·9	2·5				
	Total of district	27,681	53,132	616	1,056	919	85	98·2	94·6	33·2	1·1	8·0	48,648	29·9	1,046	0·6

* Excludes Banganapalle (39,344). † Excludes Laccadives (10,600)

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing the Particulars of Vaccination in the Madras Presidency for the official year 1913–14*—continued.

Number.	Districts.	Circles.	Population of districts or circles according to the census of 1911.	Average population per square mile.	Average number of vaccinators employed throughout the year.	Total number of persons vaccinated: Males.	Females.	Total.	Average number of persons vaccinated by each vaccinator.	Primary vaccination: Total number of operations.	Successful: Under 1 year.	1 and under 6 years.	Total of all ages.	Unknown.	Re-vaccination: Total number of operations.	Successful.	Unknown.	Percentage of successful cases in which the results were known: Primary vaccination.	Re-vaccination.	Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases: Primary vaccination.	Re-vaccination.	Average annual number of persons successfully vaccinated during previous 5 years: Number.	Ratio per 1,000.	Average annual number of deaths from small-pox during previous 5 years: Number.	Ratio per 1,000.
1	2	3	4	5	6	7			8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
54	Salem.	Salem circle	500,311	262	6	8,009	7,606	15,615	2,603	16,379	7,348	7,106	14,805	572	288	172	54	93·7	73·5	29·9	3·5	18·8				
55		Sankari circle	605,833	392	11	12,430	11,627	24,057	2,187	26,620	10,210	12,749	24,016	467	1,056	829	69	91·8	84·0	41·0	1·8	6·5	...	...	...	...
56		Hosūr do.	601,383	213	10	11,635	11,179	22,814	2.281	21,440	11,244	8,790	20,535	183	1,971	1,699	113	96·6	91·4	37·0	0·9	5·7				
		Total of district ...	1,707,527	256	27	32,074	30,412	62,486	2,314	64,439	28,802	28,645	59,356	1,222	3,315	2,700	236	93·9	87·7	36·3	1·9	7·1	62,718	36·7	423	0·2
57	South Arcot.	Cuddalore circle ...	494,072	737	4	7,226	7,376	14,602	3,650	16,031	8,000	2,996	11,044	2,937	539	296	127	84·3	71·8	23·0	18·3	23·6				
58		Vriddhāchalam circle ...	481,882	393	7	7,970	7,854	15,824	2,260	16,413	6,489	6,964	14,207	972	352	271	55	92·0	91·2	30·0	5·9	15·6				
59		Tirukkōyilūr circle ...	405,559	501	6	7,826	7,056	14,882	2,480	15,208	5,025	7,138	12,916	793	304	216	48	89·6	84·4	32·4	5·2	15·8	...	...	...	...
60		Tindivanam do.	395,246	485	5	6,278	6,024	12,302	2,460	12,707	4,387	6,648	11,310	476	192	95	73	92·5	79·8	28·9	3·7	38·0				
61		Villupuram do. ...	507,906	755	4	8,965	8,673	17,638	4,409	18,307	9,527	4,460	14,178	1,994	690	253	274	86·9	60·8	28·4	10·9	39·7				
		Total of district ...	2,284,665	545	26	38,265	36,983	75,248	2,894	78,666	33,428	28,206	63,655	7,172	2,077	1,131	577	89·0	75·4	28·4	9·1	27·8	63,374	27·7	1,735	0·8
62	South Canara.	Northern circle ...			8	9,322	7,890	17,212	2,151	14,209	4,731	6,593	12,785	488	3,723	2,829	249	93·2	81·4		3·4	6·7				
63		Central do. ...	1,142,860	285	8	6,877	6,627	13,504	1,688	11,860	5,978	4,459	11,237	129	2,025	1,699	71	95·8	86·9	37·1	1·1	3·5	...	...	...	...
64		Southern do. ...			9	7,871	7,721	15,592	1,732	13,940	4,543	6,338	12,547	341	1,812	1,284	143	92·3	76·9		2·4	7·9				
		Total of district ...	*1,142,860	285	25	24,070	22,238	46,308	1,852	40,009	15,252	17,390	36,569	958	7,560	5,812	463	93·6	81·9	37·1	2·4	6·1	42,983	37·5	580	0·5
65	Tanjore.	Tanjore circle ...	410,870	417	6	5,232	4,773	10,005	1,668	10,040	3,662	5,579	9,839	40	180	166	7	98·4	96·0	24·4	0·4	3·9				
66		Negapatam do. ...	536,502	791	10	8,454	7,333	15,787	1,579	14,639	6,030	7,049	14,315	122	1,579	1,507	39	98·6	97·9	29·5	0·8	2·5				
67		Pattukkōttai do. ...	563,520	407	9	7,044	6,791	13,835	1,537	13,973	4,534	7,255	12,916	200	265	206	19	93·8	83·7	23·3	1·4	7·2	...	...	...	...
68		Kumbakōnam do. ...	618,122	973	10	7,655	6,888	14,543	1,454	14,053	5,641	6,513	13,806	83	976	941	23	98·8	98·7	23·9	0·6	2·4				
		Total of district ...	2,129,014	578	35	28,385	25,785	54,170	1,548	52,705	19,867	26,396	50,876	445	3,000	2,820	88	97·4	96·8	25·2	0·8	2·9	66,828	31·4	1,207	0·6
69	Tinnevelly.	Shermadevi circle ...			8	10,639	9,609	20,248	2,531	20,083	11,053	6,805	18,785	346	1,074	1,025	24	95·2	97·6		1·7	2·2				
70		Srīvaikuntam do. ...	1,660,720	381	9	12,056	10,585	22,641	2,516	21,652	12,639	6,913	20,635	265	1,676	1,519	75	96·5	94·9	37·6	1·2	4·5	...	...	...	..
71		Koilpatti do. ...			8	11,498	10,204	21,702	2,713	21,126	9,609	9,033	19,506	247	1,002	953	27	93·4	97·7		1·2	2·7				
		Total of district ...	1,660,720	381	25	34,193	30,398	64,591	2,584	62,861	33,301	22,751	58,926	858	3,752	3,497	126	95·0	96·4	37·6	1·4	3·4	65,264	39·3	232	0·1
72	Trichinopoly.	Trichinopoly circle ...			12	13,367	12,586	25,953	2,163	26,009	9,522	12,923	23,554	940	464	333	72	94·0	84·9		3·6	15·5				
73		Ariyalūr do. ...	1,941,044	393	8	8,102	7,962	16,064	2,008	15,987	6,211	7,704	14,313	756	496	404	82	94·0	97·6	30·3	4·7	16·5	...	...	...	...
74		Nāmakkal do. ...			9	11,038	10,433	21,471	2,386	21,295	8,414	10,194	19,715	721	683	540	45	95·8	84·6		3·4	6·6				
		Total of district ...	†1,941,044	393	29	32,507	30,981	63,488	2,189	63,291	24,147	30,821	57,582	2,417	1,643	1,277	199	94·6	88·4	30·3	3·8	12·1	44,228	22·8	578	0·3
75	Vizagapatam.	Gunupur circle ...			9	5,402	4,198	9,600	1,067	7,616	1,246	3,121	7,372	66	1,987	1,766	120	97·6	94·6		0·9	6·0				
76		Vizagapatam circle ..			12	14,074	14,404	28,478	2,373	23,627	7,792	10,868	21,175	1,091	5,828	4,532	509	94·0	85·2		4·6	8·7				
		Government vaccinators (Gudem hills) ...	2,454,029	...	1	379	281	660	660	660	66	341	571	54	...	...	...	94·2	...	36·8	8·2	...	...	...		
77		Vizianagram circle ...			13	17,007	19,120	36,127	2,779	27,338	7,254	14,203	23,458	1,559	10,476	9,276	564	91·0	93·6		5·7	5·4				
78		Pārvatīpuram do.			13	11,893	11,569	23,462	1,805	21,880	7,606	9,643	20,349	543	2,064	1,741	129	95·4	90·0		2·5	6·2				
		Total of district ...	‡2,454,029	..	48	48,755	49,572	98,327	2,048	81,121	23,964	38,176	72,925	3,313	20,355	17,315	1,322	93·7	91·0	36·8	4·1	6·5	88,764	36·2	1,648	0·5
79	Koraput.	Jeypore circle ...	395,537	71	12	8,704	8,132	16,836	1,403	15,182	2,556	7,415	14,229	116	1,742	1,343	32	94·4	78·5	39·3	0·7	1·8				
80		Koraput do. ...	229,353	77	7	5.331	4,750	10,081	1,440	9,472	1,401	5,357	8,866	135	743	500	12	95·0	68·4	40·8	0·1	1·6	..	..		
		Total of district ...	624,890	74	19	14,035	12,882	26,917	1,417	24.654	3.957	12,772	23,095	251	2,485	1,843	44	94·6	75·5	39·9	1·0	1·8	24 152	38·6		
		Total of circles and districts	38,771,253	291	684	750,666	698,001	1,448,667	2,118	1,409,071	529,289	606,464	1,240,101	53,882	96,158	75,393	6,886	91·5	84·5	33·9	3·8	7 2	1,229,540	31·7	1,9000	0·5

* Excludes Amindivi islands (3,955). † Excludes Pudukkottai (411,886).
‡ Includes Hill Tracts.

A—VACCINE DEPARTMENT.

Statement No. I *showing the Particulars of Vaccination in the Madras Presidency for the official year 1913-14*—continued.

Number.	Districts.	Circles.	Population of districts or circles according to the census of 1911.	Average population per square mile.	Average number of vaccinators employed throughout the year.	Total number of persons vaccinated. Males.	Females.	Total.	Average number of persons vaccinated by each vaccinator.	Primary vaccination. Total number of operations.	Successful. Under 1 year.
1	2	3	4	5	6	7			8	9	10
1	Military Cantonments.	Bangalore	100,834	7,447	2	747	515	1,262	631	731	459
2		Secunderabad	103,879	5,467	4	5,490	4,510	10,000	2,500	4,452	2,865
		Total of cantonments ...	204,713	6,291	6	6,237	5,025	11,262	1,877	5,183	3,324
		Medical Subordinates ...	..	...	...	8,081	108	8,189	...	139	28
1	Municipalities.	Ādōni	31,645	2,281	1	873	614	1,487	1,487	1,295	1,090
2		Anantapur	8,457	940	1	251	127	378	378	318	237
3		Anakāpalle	20,625	1,719	1	537	422	959	959	834	621
4		Bellary	34,956	6,991	5	2,359	1,617	3,976	795	2,671	2,250
5		Berhampur	31,456	5,244	1	1,042	573	1,615	1,615	819	626
6		Bezwada	32,867	5,976	2	1,433	1,010	2,443	1,221	1,548	1,077
7		Bimlipatam	9,314	179	1	205	391	596	596	337	231
8		Calicut	78,417	7,292	4	3,869	2,818	6,687	1,672	5,127	3,070
9		Cannanore	28,957	5,791	1	1,227	549	1,776	1,776	1,162	793
10		Chicacole	17,852	5,617	1	451	584	1,035	1,035	648	471
11		Chidambaram	21,327	10,663	1	439	317	756	756	697	461
12		Chingleput	11,626	9,301	1	540	222	762	762	464	397
13		Cochin	20,023	20,023	1	1,174	509	1,683	1,683	1,065	672
14		Cocanada	54,110	9,018	2	1,064	931	1,995	997	2,048	998
15		Coimbatore	47,007	11,060	3	1,155	815	1,970	657	1,638	965
16		Conjeeveram	53,864	13,466	3	1,308	1,138	2,446	815	2,208	1,586
17		Coonoor	9,933	1,710	1	389	245	634	634	600	442
18		Cuddalore	56,574	4,254	2	1,337	1,090	2,427	1,213	2,143	1,700
19		Cuddapah	17,807	903	1	694	244	938	938	507	324
20		Dindigul	25,052	9,635	1	646	499	1,145	1,145	1,000	908
21		Ellore	37,819	12,606	2	2,267	1,483	3,750	1,875	2,757	1,588
22		Erode	16,701	16,701	1	553	400	953	953	797	570
23		Gudiyāttam	23,390	23,390	1	516	309	825	825	661	580
24		Guntūr	40,529	9,006	2	6,001	3,056	9,057	4,528	1,745	966
25		Hospet	17,671	5,644	1	596	339	935	935	715	424
26		Karūr	17,674	8,837	1	436	301	737	737	656	547
27		Kodaikānal	2,906	528	1	70	61	131	131	108	97
28		Kumbakōnam	64,647	14,626	3	1,056	942	1,998	666	1,950	1,370
29		Kurnool	26,040	5,208	1	876	612	1,488	1,488	1,222	830
30		Madras	518,660	19,209	* 21	14,520	10,645	25,165	1,198	20,836	16,798
31		Madura	134,130	5,086	5	4,077	3,789	7,866	1,573	7,401	4,690
32		Mannārgudi	21,398	3,566	1	435	385	820	820	777	635
33		Mangalore	48,412	9,380	5	1,486	1,149	2,635	527	2,082	1,327
34		Masulipatam	42,123	2,113	2	992	602	1,594	797	1,229	992
35		Māyavaram	27,121	9,040	1	801	509	1,310	1,310	1,053	818
36		Nandyal	16,230	3,607	1	546	328	874	874	606	260
37		Negapatam	60,168	11,638	3	2,504	1,574	4,078	1,359	3,805	2,103
38		Nellore	33,246	2,078	1	952	639	1,591	1,591	1,082	738
39		Ongole	13,286	3,321	1	887	592	1,479	1,479	493	370
40		Ootacamund	18,829	1,345	2	831	554	1,385	692	679	580
41		Palamcottah	44,909	11,227	2	1,294	792	2,086	1,043	1,660	1,107
42		Palghat	44,319	4,185	2	1,243	1,102	2,345	1,172	2,147	1,461
43		Parlākimedi	18,370	13,812	1	693	422	1,115	1,115	984	454
44		Periyakulam	18,715	24,953	1	459	398	857	857	798	668
45		Palni	13,211	7,549	1	670	372	1,042	1,042	691	555
46		Rajahmundry	48,417	14,583	2	2,499	885	3,384	1,692	1,991	1,326

Number.	Circles.	Primary vaccination. Successful. 1 and under 6 years.	Total of all ages.	Unknown.	Re-vaccination. Total number of operations.	Successful.	Unknown.	Percentage of successful cases in which the results were known. Primary vaccination.	Re-vaccination.	Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases. Primary vaccination.	Re-vaccination.	Average annual number of persons successfully vaccinated during previous 5 years. Number.	Ratio per 1,000.	Average annual number of deaths from small-pox during previous 5 years. Number.	Ratio per 1,000.
		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	Bangalore	177	665	...	531	454	2	91·0	85·8	11·1	...	0·4	1,226	12·2	50	0·5
2	Secunderabad	918	4,251	8	5,710	3,758	88	95·7	66·8	77·1	0·2	1·5	5,167	49·7	66	0·6
	Total of cantonments	1,095	4,916	8	6,241	4,212	90	95·0	68·5	44·6	0·2	1·4	6,393	31·2	116	0·5
	Medical Subordinates	17	114	6	8,050	5,363	343	85·7	69·6	...	4·3	4·3	...	...	...	..
1	Ādōni	55	1,145	141	202	192	8	99·2	99·0	42·2	10·9	4·0	1,081	34·1	4	0·1
2	Anantapur	19	281	8	101	69	16	90·6	81·2	41·4	2·5	15·8	315	37·3	12	1·4
3	Anakāpalle	148	800	...	158	79	...	95·9	50·0	42·6	...	...	842	40·8	15	0·7
4	Bellary	196	2,457	...	1,338	939	...	92·0	70·2	97·2	...	...	2,772	79·3	2	0·05
5	Berhampur	136	763	1	819	614	58	93·3	80·7	43·8	0·1	7·1	1,315	41·8	3	0·09
6	Bezwada	367	1,519	1	909	783	3	98·2	86·4	70·0	0·1	0·3	1,161	35·3	6	0·2
7	Bimlipatam	33	314	...	269	210	1	93·2	78·4	56·3	...	0·4	423	45·4	2	0·2
8	Calicut	818	5,020	16	1,677	1,608	37	98·2	96·0	84·5	0·3	2·2	6,379	81·3	52	0·7
9	Cannanore	266	1,074	24	748	399	112	94·4	62·7	50·9	2·1	15·0	1,850	63·9	121	4·2
10	Chicacole	118	634	..	405	393	...	97·8	97·0	57·5	...	...	1,047	58·6	4	0·2
11	Chidambaram	82	644	17	77	72	1	94·7	94·7	33·6	2·4	1·3	665	31·2	1	0·05
12	Chingleput	47	453	...	305	170	38	97·6	63·7	53·6	...	12·5	610	52·5	1	0·09
13	Cochin	166	1,012	13	656	213	110	96·2	39·0	61·2	1·2	16·8	1,242	62·0	48	2·4
14	Cocanada	567	1,652	75	104	39	17	83·7	44·8	31·3	3·7	16·3	3,761	69·5	64	1·2
15	Coimbatore	428	1,435	35	358	205	40	89·5	64·5	34·9	2·1	11·2	1,170	24·9	103	2·2
16	Conjeeveram	290	1,902	68	238	114	49	88·9	60·3	37·4	3·1	20·6	1,598	29·7	5	0·09
17	Coonoor	119	566	4	34	29	2	95·0	90·6	59·9	0·7	5·9	456	45·9	1	0·1
18	Cuddalore	414	2,123	4	284	214	26	99·3	82·9	41·3	0·2	9·2	2,500	44·2	7	0·1
19	Cuddapah	107	460	...	444	271	2	90·7	61·3	41·1		0·5	873	49·0	5	0·3
20	Dindigul	69	979	...	170	157	..	97·9	92·4	45·3	...	...	1,120	44·7	10	0·4
21	Ellore	335	2,623	.	1,038	701	65	95·1	72·0	87·9	...	6·3	2,271	60·0	27	0·7
22	Erode	193	769	...	167	122	6	96·5	75·8	53·4	...	3·6	759	45·4	1	0·06
23	Gudiyāttam	67	647		176	81	91	97·9	95·3	31·1	...	51·7	777	33·2	...	...
24	Guntūr	497	1,529	108	7,583	3,599	2,190	93·4	66·7	126·5	6·2	28·9	1,155	28·5	26	0·6
25	Hospet	231	655	...	222	184	...	91·6	82·9	47·5		...	...	...	9	0·5
26	Karūr	59	636	1	137	124	4	97·1	93·2	43·0	0·2	2·9	595	33·6	1	0·05
27	Kodaikānal	9	107	...	23	21	1	99·1	95·5	44·1	...	4·3	112	38·5	...	...
28	Kumbakōnam	393	1,828	4	135	87	3	93·9	65·9	29·6	0·2	2·2	1,870	28·9	18	0·3
29	Kurnool	331	1,187	...	301	101	91	97·1	48·1	49·5	...	30·2	1,205	46·3	1	0·04
30	Madras	3,095	19,953	504	4,410	2,197	698	98·1	59·2	42·7	2·4	15·8	29,810	57·5	157	0·3
31	Madura	2,447	7,220	2	1,003	921	...	97·6	91·8	60·7	0·03	...	8,661	64·6	219	1·6
32	Mannārgudi	137	774	...	43	37	...	99·6	86·0	37·9	...	...	788	36·8	22	1·0
33	Mangalore	639	2,068	...	553	508	17	99·3	94·8	53·2	...	3·1	3,512	72·5	122	2·5
34	Masulipatam	156	1,153	1	367	337	...	93·9	91·8	35·4	0·1		1,418	33·7	46	1·1
35	Māyavaram	173	1,007	7	287	247	17	96·3	91·5	46·2	0·7	5·9	1,189	43·8	10	0·4
36	Nandyal	134	442	20	268	120	38	75·4	52·2	34·6	3·3	14·2	667	41·1	1	0·06
37	Negapatam	1,360	3,495	3	273	210	6	91·9	78·7	61·6	0·1	2·2	4,411	73·1	17	0·3
38	Nellore	114	864	15	639	336	74	81·0	59·5	36·1	1·4	11·6	1,030	31·0	30	0·9
39	Ongole	51	425	9	1,025	919	15	87·8	91·0	101·2	1·8	1·5	611	46·0	39	2·9
40	Ootacamund	88	676	...	706	614	...	99·6	87·0	68·5	...	...	1,343	71·3	3	0·2
41	Palamcottah	422	1,573	16	572	360	168	95·7	89·1	43·0	1·0	29·4	1,540	34·3	4	00·9
42	Palghat	417	1,962	...	309	175	...	91·4	56·6	48·2	...		2,051	46·3	74	1·7
43	Parlākimedi	356	943	...	141	75	5	95·8	55·1	55·4	...	3·5	1,039	56·6	4	0·2
44	Periyakulam	89	765	4	64	46	7	96·3	80·7	43·3	0·5	10·9	801	42·7	1	0·05
45	Palni	91	657	...	351	307	11	95·1	90·3	73·0	...	3·1	760	57·5	10	0·7
46	Rajahmundry	590	1,916	1	1,393	893	164	96·3	72·7	58·0	0·1	11·8	2,750	56·8	23	0·5

* There were 21 Vaccinators including one Vaccinatrix from 1st April to 31st July 1913 and 10 Medical Vaccinators with 10 Assistants and a Vaccinatrix for the rest of the period.

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing the Particulars of Vaccination in the Madras Presidency for the official year 1913–14*—continued.

Number.	Districts.	Circles.	Population of districts or circles according to the census of 1911.	Average population per square mile.	Average number of vaccinators employed throughout the year.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator. †	Primary vaccination. Total number of operations.	Primary vaccination. Under 1 year.
1	2	3	4	5	6	7			8	9	10
						Males.	Females.	Total.			
47	Municipalities—cont.	Salem	59,153	13,984	2	1,892	1,482	3,374	1,672	3,027	2,950
48		Srīrangam	24,799	3,543	1	694	564	1,258	1,258	1,202	703
49		Srīvilliputtur	29,066	20,761	1	612	523	1,135	1,135	1,118	984
50		Tanjore	60,341	805	2	2,215	1,421	3,636	1,818	2,093	1,524
51		Tellicherry	29,258	11,703	2	899	621	1,520	760	838	742
52		Tenali	18,195	6,998	1	530	469	999	999	937	466
53		Tinnevelly	44,805	7,469	2	1,353	938	2,291	1,145	1,967	1,651
54		Trichinopoly	123,512	14,899	2	3,865	2,467	6,332	3,166	5,559	3,701
55		Tiruppattūr	10,470	4,188	1	257	151	408	408	350	295
56		Tirupati	16,701	5,010	1	381	262	643	643	487	412
57		Tiruvannāmalai ...	21,244	1,931	1	507	388	895	895	824	661
58		Tuticorin	40,185	11,481	3	2,110	1,369	3,479	1,159	2,089	1,374
59		Vāniyambādi	20,406	5,830	1	406	310	716	716	649	446
60		Vellore	49,746	8,102	2	1,456	925	2,381	1,190	1,908	1,478
61		Vizagapatam	43,413	8,349	2	935	740	1,675	837	1,397	849
62		Vizianagram	37,550	7,510	2	2,183	1,290	3,473	1,736	1,884	1,218
63		Walajapet	9,962	9,962	1	366	146	512	512	330	284
		Total of Municipalities.	2,619,596	7,051	126	88,914	61,021	149,935	1,190	112,713	80,511
		Grand Total ...	*41,390,849	311	816	853,898	764,155	1,618,053	1,983	1,527,106	613,152

Number.	Circles.	Primary vaccination. Successful. 1 and under 6 years.	Primary vaccination. Successful. Total of all ages.	Primary vaccination. Successful. Unknown.	Re-vaccination. Total number of operations.	Re-vaccination. Successful.	Re-vaccination. Unknown.	Percentage of successful cases in which the results were known. Primary vaccinations.	Percentage of successful cases in which the results were known. Re-vaccination.	Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases. Primary vaccination.	Percentage of unknown cases to total cases. Re-vaccination.	Average annual number of persons successfully vaccinated during previous 5 years. Number.	Average annual number of persons successfully vaccinated during previous 5 years. Ratio per 1,000.	Average annual number of deaths from small-pox during previous 5 years. Number.	Average annual number of deaths from small-pox during previous 5 years. Ratio per 1,000.
1	3	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
47	Salem	68	3,021	...	349	279	...	99·8	79·9	55·8	...	...	2,650	44·8	10	0·2
48	Srīrangam	405	1,156	24	56	47	8	98·1	97·9	48·5	2·0	14·3	1,168	47·1	26	1·0
49	Srīvilliputtur	72	1,070	2	63	25	21	95·9	59·5	37·7	0·2	33·3	1,060	35·8	..	...
50	Tanjore	429	2,048	...	1,599	1,285	41	97·8	82·5	55·2	...	2·6	2,218	36·8	82	1·3
51	Tellicherry	42	815	...	711	320	43	97·3	47·9	38·8	...	6·0	1,215	41·5	33	1·1
52	Tenali	326	843	18	138	97	7	91·7	74·0	51·7	1·9	5·1	582	32·0	8	0·4
53	Tinnevelly	221	1,925	9	348	308	24	98·3	95·1	49·8	0·5	6·9	1,635	36·5	27	0·6
54	Trichinopoly	1,577	5,400	70	773	531	125	98·4	81·9	48·0	1·3	16·2	6,094	49·3	110	0·9
55	Tiruppattūr	4	349	...	58	56	...	99·7	96·6	38·7	...	...	632	60·4	14	1·3
56	Tirupati	64	478	...	156	77	45	98·2	69·4	33·2	...	28·8	518	31·0	1	0·06
57	Tiruvannāmalai	67	747	...	115	89	6	90·7	81·7	39·4	...	5·2	755	36·0	25	1·2
58	Tuticorin	509	2,049	4	1,396	1,260	86	98·3	96·2	82·3	0·2	6·2	2,213	55·1	32	0·8
59	Vāniyambādi	89	538	55	96	32	52	90·6	72·7	27·9	8·5	54·2	776	38·0	6	0·3
60	Vellore	392	1,896		481	137	344	99·4	100·0	40·9	...	7·5	1,840	37·0	14	0·3
61	Vizagapatam	321	1,217	7	364	128	106	87·6	49·6	31·0	0·5	29·1	1,500	34·5	22	0·5
62	Vizianagram	287	1,646	14	1,719	1,272	83	88·0	77·8	77·7	0·7	4·8	2,860	76·2	15	0·4
63	Walajapet	16	306	...	192	125	50	92·7	88·0	43·3	...	26·0	431	43·3	4	0·4
	Total of Municipalities.	22,408	106,611	1,305	40,096	26,160	5,232	95·7	75·0	50·7	1·2	13·0	130,452	49·8	1,760	0·7
	Grand Total	629,984	1,351,742	55,201	150,545	111,128	12,551	91·8	80·5	35·3	3·6	8·3	1,366,385	33·0	20,876	0·5

* Excludes the population of the Cantonments of Bangalore and Secunderabad.
† In finding the average number of persons vaccinated, the total work of medical subordinates is excluded.
Note.—(1) Difference between number of operations and number of persons vaccinated, equals 59,598 which represents secondary operations.
(2) This statement does not include the statistics of dispensary vaccination which are exhibited separately in statement No. III.
N.B.—In calculating the percentage of success shown in this statement and statement No. III, unknown cases have not been taken into account.

SUMMARY OF STATEMENT No. I.

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which results were known.		Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of department.	Average cost of each successful case.
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under six years.			
1	2		3		4		5		6		7	8	9
												RS. A. P.	RS. A. P.
By Special staff (statement No. I).	1,467,751	150,302	1,527,106	150,545	91·8	80·5	816	1,983	613,152	629,984	35·3	337,685 12 8	0 3 8
By Dispensary staff (statement No. III).	6	39	6	39	100·0	90·9	...	...	...	...	...	...	...
By other agencies, if any.	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	1,467,757	150,341	1,527,112	150,584	91·8	80·5	816	1,983	613,152	629,984	35·3	‡337,685 12 8	0 3 8

‡ Exclusive of the pay and allowances of the Inspector of Vaccination and Deputy Sanitary Commissioner, Madras and Deputy Sanitary Commissioners, Central and Northern Ranges.

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency for the official year 1913–14.*

Number.	Districts.	Circles.	Expenditure. Inspector of Vaccination and Deputy Sanitary Commissioner.	Pay.	Deputy Inspectors. First grade.	Second grade.	Third grade.	Pay.	Vaccinators. First class.	Second class.	Probationers.	Pay.	Peons, etc. Number.	Pay.	Total pay of establishment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				RS. A. P.				RS. A. P.				RS. A. P.		RS. A. P.	RS. A. P.
1	Anantapur.	Anantapur circle ...	...	...	...	...	1	548 11 9	3	3	3	1,641 14 9	1	94 3 2	2,284 13 8
2		Penukonda do. ...	...	...	...	...	1	510 0 3	3	3	5	1,424 6 1	1	96 0 0	2,030 6 4
		Total of district ...	...	...	...	...	2	1,058 12 0	6	6	8	3,066 4 10	2	190 3 2	4,315 4 0
3	Bellary.	Bellary circle ...	...	...	...	..	1	480 0 0	5	5	1	1,633 3 6	1	84 0 0	2,197 3 6
4		Hospet do. ...	...	...	...	...	1	660 0 0	3	8	...	2,091 14 11	1	97 8 0	2,849 6 11
		Total of district ...	...	...	...	...	2	1,140 0 0	8	13	1	3,725 2 5	2	181 8 0	5,046 10 5
5	Chingleput.	Chingleput circle ...	...	...	...	1	...	712 0 0	...	4	...	1,729 1 7	1	84 0 0	2,525 1 7
6		Saidapet do. ...	...	...	1	...	...	791 2 2	...	4	...	1,235 4 8	1	76 5 6	2,102 12 4
7		Ponneri do. ...	...	...	1	...	...	805 7 9	...	4	...	1,336 11 10	1	96 0 0	2,238 3 7
		Total of district ...	...	...	2	1	...	2,308 9 11	...	12	...	4,301 2 1	3	256 5 6	6,866 1 6
8	Chittoor.	Chittoor circle ...	...	...	...	1	...	702 10 2	5	4	1	1,481 0 11	1	84 0 0	2,267 11 1
9		Karvetnagar circle ...	...	...	...	...	1	835 0 0	6	5	2	1,751 6 2	1	96 0 0	2,682 6 2
		Total of district ...	...	...	...	1	1	1,537 10 2	11	9	3	32,32 7 1	2	180 0 0	4,950 1 3
10	Coimbatore.	North Coimbatore circle ...	...	...	...	...	1	480 0 0	3	5	1	2,025 2 8	1	96 0 0	2,601 2 8
11		East do. do. ...	...	...	1	...	...	776 9 3	1	7	2	1,426 13 9	1	99 8 0	2,302 15 0
12		South do. do. ...	...	...	...	1	...	720 0 0	2	3	2	1,244 0 0	1	100 8 0	2,064 8 0
13		Central do. do. ...	...	...	1	...	...	831 4 0	2	6	1	1,409 6 6	1	99 4 10	2,339 15 4
		Total of district ...	...	...	2	1	1	2,807 13 3	8	21	6	6,105 6 11	4	395 4 10	9,308 9
14	Cuddapah.	Cuddapah circle ...	...	...	1	...	...	840 0 0	2	7	...	1,418 6 10	1	97 0 0	2,355 6 10
15		Proddatur do. ...	...	...	...	...	1	592 15 9	2	5	...	1,081 4 8	1	97 0 0	1,771 4 5
16		Sidhout circle ...	...	...	...	1	...	824 12 6	4	4	...	1,413 7 3	1	104 0 0	2,342 3 9
		Total of district ...	...	...	1	1	1	2,257 12 3	8	16	...	3,913 2 9	3	298 0 0	6,468 15 0
17	Ganjām.	Berhampur circle ...	...	...	...	...	1	570 0 0	3	5	1	1,537 1 5	1	102 0 0	2,209 1 5
18		Chicacole do. ...	...	...	...	1	...	680 0 0	2	6	1	1,417 2 6	1	102 0 0	2,199 2 6
19		Ganjām Hill tracts ...	...	...	...	...	1	581 9 8	3	9	3	1,925 13 5	1	88 4 0	2,595 11 1
20		Aska circle ...	...	...	...	...	1	590 0 0	2	4	2	1,031 1 0	1	102 0 0	1,723 1 0
21		Parlākimedi circle ...	...	...	1	...	...	840 0 0	1	6	1	1,097 6 1	1	102 0 0	2,039 6 1
22		Purushottapur do. ...	...	...	...	...	1	473 8 9	3	5	...	1,437 11 8	1	102 0 0	2,013 4 5
		Total of district ...	...	...	1	1	4	3,735 2 5	14	35	8	8,446 4 1	6	598 4 0	12,779 10 6
23	Gōdāvari.	Cocanada circle ...	...	...	...	...	1	497 12 4	3	3	...	1,081 14 0	1	89 0 0	1,668 10 4
24		Rajahmundry do. ...	...	...	...	...	1	495 9 10	5	4	1	1,611 9 4	1	104 8 0	2,211 11 2
25		Polavaram do. ...	...	...	...	...	1	731 5 7	2	4	...	1,216 4 0	1	108 0 0	2,055 9 7
26		Peddapur do. ...	...	...	...	...	1	490 5 2	4	6	...	1,605 6 6	1	97 0 0	2,192 11 8
27		Bhadrāchalam do. ...	...	...	...	...	1	734 8 0	2	3	1	717 8 0	1	79 3 9	1,531 3 9
		Total of district ...	...	...	...	...	5	2,949 8 11	16	20	2	6,232 9 10	5	477 11 9	9,659 14 6
28	Guntūr.	Guntūr circle ...	...	...	1	...	...	730 0 0	3	4	3	1,362 8 7	1	100 8 0	2,193 0 7
29		Narasaraopet circle ...	...	...	...	...	1	465 6 6	2	3	6	1,119 14 3	1	94 0 3	1,679 5 0
30		Bāpatla circle ...	...	...	...	1	...	776 4 0	4	3	4	1,564 1 9	1	91 2 7	2,431 8 4
		Total of district ...	...	...	1	1	1	1,971 10 6	9	10	13	4,046 8 7	3	285 10 10	6,303 13 11
31	Kistna.	Ellore circle ...	...	...	...	1	...	720 0 0	1	3	11	2,136 4 11	1	84 0 0	2,940 4 11
32		Masulipatam circle ...	...	...	1	...	...	790 0 0	2	4	8	1,581 4 4	1	101 0 0	2,472 4 4
33		Narasapur do. ...	...	...	...	1	...	720 0 0	4	8	1	2,244 7 8	1	100 8 0	3,064 15 8
		Total of district ...	...	...	1	2	...	2,230 0 0	7	15	20	5,962 0 11	3	285 8 0	8,477 8 11
34	Kurnool.	Cumbum circle ...	...	...	1	...	...	790 0 0	4	4	5	1,905 11 2	1	100 0 0	2,795 11 2
35		Kurnool do. ...	...	...	...	...	1	480 0 0	4	4	5	2,084 7 5	1	100 0 0	2,664 7 5
		Total of district ...	...	...	1	...	1	1,270 0 0	8	8	10	3,990 2 7	2	200 0 0	5,460 2 7
36	Madura.	Dindigul circle ...	...	...	1	...	...	802 0 0	...	4	...	1,327 11 1	1	99 0 0	2,228 11 1
37		Madura do. ...	...	...	...	1	...	770 0 0	...	4	...	1,421 14 5	1	84 0 0	2,275 14 5
38		Usilampatti do. ...	...	...	1	...	...	840 0 0	...	5	...	1,630 9 11	1	95 7 1	2,566 1 0
		Total of district ...	...	...	2	1	...	2,412 0 0	...	13	...	4,380 3 5	3	278 7 1	7,070 10 6
39	Madras.	Madras Presidency ...	2	10,538 14 8	...	...	...	...	...	...	...	...	...	...	10,538 14 8
		Total of district ...	2	10,538 14 8	...	...	...	...	...	...	...	...	...	...	10,538 14 8

A—VACCINE DEPARTMENT.

Statement No. II *showing the Cost of the Department in the Madras Presidency for the official year 1913–14—continued.*

Number.	Districts.	Circles.	Expenditure—*cont.* Travelling allowance. 17	Contingencies.* 18	Total cost.* 19	Paid from Imperial funds. 20	Provincial funds. 21	Local funds.* 22	Municipal funds. 23	Total.* 24	Number of all successful primary vaccination and re-vaccination. 25	Average cost of each successful case. 26
			RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
1	Anantapur.	Anantapur circle	411 11 9	705 5 10	3,401 15 3	...	1,116 6 2	2,285 9 1	...	3,401 15 3	13,730	0 4 0
2		Penukonda do.	405 6 9	727 10 1	3,163 7 2	...	1,030 5 9	2,133 1 5	...	3,163 7 2	14,135	0 3 7
		Total of district	817 2 6	1,432 15 11	6,565 6 5	...	2,146 11 11	4,418 10 6	...	6,565 6 5	27,865	0 3 9
3	Bellary.	Bellary circle	1,161 10 8	676 1 5	4,034 15 7	...	953 7 10	3,081 7 9	...	4,034 15 7	16,394	0 3 11
4		Hospet do.	438 4 8	595 7 0	3,883 2 7	...	1,303 15 8	2,579 2 11	...	3,883 2 7	14,233	0 4 4
		Total of district	1,599 15 4	1,271 8 5	7,918 2 2	...	2,257 7 6	5,660 10 8	...	7,918 2 2	30,627	0 4 2
5	Chingleput.	Chingleput circle	333 8 6	695 10 0	3,554 4 1	...	1,248 14 9	2,305 5 4	...	3,554 4 1	13,670	0 4 2
6		Saidapet do.	991 14 7	578 13 4	3,673 8 3	...	1,476 2 11	2,197 5 4	...	3,673 8 3	11,068	0 5 4
7		Ponnēri do.	822 5 9	603 0 2	3,663 9 6	...	1,332 2 6	2,331 7 0	...	3,663 9 6	11,476	0 5 1
		Total of district	2,147 12 10	1,877 7 6	10,891 5 10	...	4,057 4 2	6,834 1 8	...	10,891 5 10	36,214	0 4 10
8	Chittoor.	Chittoor circle	835 9 7	607 1 10	3,710 6 6	...	1,178 0 4	2,532 6 2	...	3,710 6 6	12,381	0 4 9
9		Karvetnagar circle	1,021 2 2	874 7 0	4,577 15 4	...	1,411 3 8	3,166 11 8	...	4,577 15 4	18,412	0 4 0
		Total of district	1,856 11 9	1,481 8 10	8,288 5 10	...	2,589 4 0	5,699 1 10	...	8,288 5 10	30,793	0 4 4
10	Coimbatore.	North Coimbatore circle	495 14 8	702 8 9	3,799 10 1	...	1,012 0 0	2,787 10 1	...	3,799 10 1	12,222	0 5 0
11		East do. do.	413 12 8	1,106 3 11	3,822 15 7	...	1,448 4 9	2,374 10 10	...	3,822 15 7	17,345	0 3 6
12		South do. do.	256 15 0	496 6 3	2,817 13 3	...	1,132 2 6	1,685 10 9	...	2,817 13 3	10,334	0 4 4
13		Central do. do.	449 8 6	1,048 15 3	3,838 7 1	...	1,652 1 7	2,186 5 6	...	3,838 7 1	15,928	0 3 10
		Total of district	1,616 2 10	3,354 2 2	14,278 14 0	...	5,244 8 10	9,034 5 2	...	14,278 14 0	55,829	0 4 1
14	Cuddapah.	Cuddapah circle	659 15 4	451 12 9	3,467 2 11	...	1,306 11 9	2,160 7 2	...	3,467 2 11	9,624	0 5 9
15		Proddatur do.	625 14 7	529 15 7	2,927 2 7	...	1,065 6 9	1,861 11 10	...	2,927 2 7	9,820	0 4 9
16		Sidhout do.	762 7 10	468 5 9	3,573 1 4	...	1,343 13 4	2,229 4 0	...	3,573 1 4	12,240	0 4 8
		Total of district	2,048 5 9	1,450 2 1	9,967 6 10	...	3,715 15 10	6,251 7 0	...	9,967 6 10	31,684	0 5 0
17	Ganjām.	Berhampur circle	508 0 9	824 7 6	3,541 9 8	...	1,261 9 11	2,279 15 9	...	3,541 9 8	14,266	0 4 0
18		Chicacole do.	318 7 9	490 12 4	3,008 6 7	...	1,164 15 1	1,843 7 6	...	3,008 6 7	12,249	0 3 11
19		Ganjām Hill tracts	1,291 3 0	590 10 9	4,477 8 10	...	4,477 8 10	...	...	4,477 8 10	14,990	0 4 9
20		Aska circle	348 4 0	705 3 3	2,776 8 3	...	1,114 11 6	1,661 12 9	...	2,776 8 3	11,715	0 3 9
21		Parlākimedi circle	417 4 1	585 14 4	3,042 8 6	...	1,439 4 8	1,603 3 10	...	3,042 8 6	11,705	0 4 2
22		Purushottapur do.	295 6 0	504 7 8	2,813 2 1	...	932 9 6	1,880 8 7	...	2,813 2 1	11,077	0 4 1
		Total of district	3,178 9 7	3,701 7 10	19,659 11 11	...	10,390 11 6	9,269 0 5	...	19,659 11 11	76,002	0 4 2
23	Gōdāvari.	Cocanada circle	674 2 10	627 3 6	2,970 0 8	...	1,011 14 7	1,958 2 1	...	2,970 0 8	12,147	0 3 10
24		Rajahmundry do.	898 11 10	815 3 10	3,925 10 10	...	1,018 2 7	2,907 8 3	...	3,925 10 10	17,919	0 3 6
25		Polavaram do.	1,014 8 6	244 1 5	3,314 3 6	...	1,333 11 4	1,980 8 2	...	3,314 3 6	5,820	0 9 1
26		Peddapur do	850 3 4	863 13 3	3,906 12 3	...	981 6 5	2,925 5 10	...	3,906 12 3	17,285	0 3 7
27		Bhadrāchalam do.	654 10 6	341 10 8	2,527 8 11	...	2,527 8 11	...	...	2,527 8 11	3,051	0 13 3
		Total of district	4,092 5 0	2,892 0 8	16,644 4 2	...	6,872 11 10	9,771 8 4	...	16,644 4 2	56,222	0 4 9
28	Guntūr.	Guntūr circle	667 2 3	1,042 6 6	3,902 9 4	...	1,183 2 9	2,719 6 7	...	3,902 9 4	26,217	0 2 5
29		Narasaraopet circle	528 3 4	790 3 9	2,997 12 1	...	865 14 0	2,131 14 1	...	2,997 12 1	22,200	0 2 2
30		Bāpatla circle	654 1 2	886 9 11	3,972 3 5	...	1,161 14 10	2,810 4 7	...	3,972 3 5	23,956	0 2 8
		Total of district	1,849 6 9	2,719 4 2	10,872 8 10	...	3,210 15 7	7,661 9 3	...	10,872 8 10	72,373	0 2 5
31	Kistna.	Ellore circle	1,269 15 6	972 7 11	5,182 12 4	...	1,208 4 6	3,974 7 10	...	5,182 12 4	29,017	0 2 10
32		Masulipatam circle	1,177 5 0	1,056 0 2	4,705 9 6	...	1,377 7 3	3,328 2 3	...	4,705 9 6	23,509	0 3 3
33		Narasapur do.	1,089 6 2	907 13 7	5,062 3 5	...	1,275 9 6	3,786 9 11	...	5,062 3 5	22,233	0 3 8
		Total of district	3,536 10 8	2,936 5 8	14,950 9 3	...	3,861 5 3	11,089 4 0	...	14,950 9 3	74,759	0 3 2
34	Kurnool.	Cumbum circle	551 12 5	601 12 1	3,949 3 8	...	1,474 15 2	2,474 4 6	...	3,949 3 8	15,342	0 4 1
35		Kurnool do.	263 8 6	657 14 4	3,585 14 3	...	872 4 0	2,713 10 3	...	3,585 14 3	17,839	0 3 3
		Total of district	815 4 11	1,259 10 5	7,535 1 11	...	2,347 3 2	5,187 14 9	...	7,535 1 11	33,181	0 3 8
36	Madura.	Dindigul circle	872 6 8	794 2 11	3,895 4 8	...	1,323 15 6	2,571 5 2	...	3,895 4 8	15,694	0 4 0
37		Madura do.	974 9 2	873 1 7	4,123 9 2	...	1,400 2 3	2,723 6 11	...	4,123 9 2	11,965	0 5 6
38		Usilampatti do.	1,034 4 1	796 7 2	4,396 12 3	...	1,370 8 7	3,026 3 8	...	4,396 12 3	18,052	0 3 11
		Total of district	2,881 3 11	2,463 11 8	12,415 10 1	...	4,094 10 4	8,320 15 9	...	12,415 10 1	45,711	0 4 4
39	Madras.	Madras Presidency Town	2,937 2 0	...	13,476 0 8	...	†13,476 0 8	...	...	13,476 0 8	...	...
		Total of district	2,937 2 0	...	13,476 0 8	...	13,476 0 8	...	...	13,476 0 8	...	...

* Includes cost of lymph supplied by King Institute of Preventive Medicine during 1913–14. † Includes the pay and allowances of the Dy. Sanitary Commissioners, Northern and Central Ranges.

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency for the official year 1913–14*—continued.

Number—cont.	Districts—cont.	Circles—cont.	Expenditure. Inspector of Vaccination and Deputy Sanitary Commissioner.	Pay.	Deputy Inspectors. First grade.	Deputy Inspectors. Second grade.	Deputy Inspectors. Third grade.	Deputy Inspectors. Pay.	Vaccinators. First class.	Vaccinators. Second class.	Vaccinators. Probationers.	Vaccinators. Pay.	Peons, etc. Number.	Peons, etc. Pay.	Total pay of establishment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				RS. A. P.				RS. A. P.				RS. A. P.		RS. A. P.	RS. A. P.
40	Malabar.	Tellicherry circle	...	...	1	...	...	871 5 0	2	9	...	1,829 12 2	1	101 11 6	2,802 12 8
41		Calicut do.	...	...	...	...	1	480 0 0	4	7	...	1,645 7 8	1	102 0 0	2,227 7 8
42		Palghat do.	...	...	...	1	...	759 0 0	3	9	...	1,969 12 4	1	102 0 0	2,830 12 4
43		Malappuram do.	...	...	...	...	1	480 0 0	3	8	...	1,566 11 1	1	104 0 0	2,150 11 1
		Total of district	...	...	1	1	2	2,590 5 0	12	33	...	7,011 11 3	4	409 11 6	10,011 11 9
44	Nellore.	Kavali circle	...	...	..	1	...	855 0 0	...	4	4	1,755 2 4	1	96 0 0	2,706 2 4
45		Gudur do.	...	...	1	...	...	840 0 0	5	1	2	1,877 8 9	1	96 0 0	2,813 8 9
46		Kanigiri do.	...	...	...	..	1	480 0 0	3	3	2	1,535 8 6	1	96 0 0	2,111 8 6
		Total of district	...	...	1	1	1	2,175 0 0	8	8	8	5,168 3 7	3	288 0 0	7,631 3 7
47	Nilgiris.	Nilgiris circle	...	...	...	...	1	660 0 0	3	...	...	1,092 2 0	1	114 0 0	1,866 2 0
		Total of district	...	...	...	...	1	660 0 0	3	...	...	1,092 2 0	1	114 0 0	1,866 2 0
48	North Arcot.	Vellore circle	...	...	...	...	1	480 0 0	3	...	...	690 3 1	1	97 0 0	1,267 3 1
49		Rānipēttai do.	...	...	1	...	...	893 14 11	3	...	...	771 8 4	1	97 0 0	1,762 7 3
50		Polur do.	...	...	...	...	1	480 0 0	1	2	..	709 6 2	1	97 8 0	1,286 14 2
51		Tiruppattūr do.	...	...	..	1	...	720 0 0	3	6	1	2,160 9 3	1	97 7 7	2,978 0 10
		Total of district	...	...	1	1	2	2,573 14 11	10	8	1	4,331 10 10	4	388 15 7	7,294 9 4
52	Rāmnād.	Srīvilliputtūr circle	...	...	1	...	...	840 0 0	3	5	1	1,442 12 0	1	93 8 0	2,376 4 0
53		Paramagudi do.	...	..	...	1	...	719 15 0	3	6	1	2,161 11 6	1	102 0 0	2,983 10 6
54		Tiruppattūr do.	...	...	...	1	...	720 0 0	3	8	1	1,700 0 10	1	100 0 3	2,520 1 1
		Total of district	...	...	1	2	...	2,279 15 0	9	19	3	5,304 8 4	3	295 8 3	7,879 15 7
55	Salem.	Salem circle	...	...	1	...	...	839 3 5	3	3	1	917 10 6	1	95 0 0	1,851 13 11
56		Sankari do.	...	...	...	...	1	618 12 2	1	10	...	1,488 12 0	1	84 3 3	2,191 11 5
57		Hosūr do.	...	...	...	...	1	480 0 0	3	7	...	1,449 1 8	1	96 0 0	2,025 1 8
		Total of district	...	...	1	...	2	1,937 15 7	7	20	1	3,855 8 2	3	275 3 3	6,068 11 0
58	South Arcot.	Cuddalore circle	...	...	...	1	...	660 0 0	...	4	...	1,262 6 10	1	102 0 0	2,024 6 10
59		Vriddhāchalam do.	...	...	...	1	.	620 0 0	3	3	1	939 5 9	1	102 0 0	1,661 5 9
60		Tirukkōyilūr do.	...	...	..	...	1	520 0 0	2	3	1	914 1 4	1	102 0 0	1,536 1 4
61		Villupuram do.	...	...	1	...	...	765 6 0	...	4	...	1,643 3 5	1	99 8 6	2,508 1 11
62		Tindivanam do.	...	...	...	...	1	660 0 0	3	1	1	782 9 8	1	98 9 7	1,541 3 3
		Total of district	...	...	1	2	2	3,225 6 0	8	15	3	5,541 11 0	5	504 2 1	9,271 3 1
63	South Canara.	Northern circle	...	...	1	...	...	840 0 0	3	3	2	2,076 3 5	1	102 0 0	3,018 3 5
64		Central do.	...	...	...	1	...	828 15 2	2	1	5	1,779 14 1	1	102 0 0	2,710 13 3
65		Southern do.	...	...	...	...	1	521 8 0	1	6	2	1,754 9 8	1	102 0 0	2,378 1 8
		Total of district	...	...	1	1	1	2,190 7 2	6	10	9	5,610 11 2	3	306 0 0	8,107 2 4
66	Tanjore.	Tanjore circle	..	...	1	...	..	675 15 2	2	4	...	832 7 5	1	94 0 0	1,602 6 7
67		Negapatam do.	...	...	...	1	...	830 0 0	3	7	1	1,216 6 4	1	96 0 0	2,142 6 4
68		Pattukkōttai do.	...	...	...	..	1	523 2 11	2	10	1	1,075 2 5	1	96 0 0	1,694 5 4
69		Kumbakōnam do.	...	...	...	...	1	480 0 0	2	10	1	1,097 3 9	1	88 15 1	1,666 2 10
		Total of district	...	...	1	1	2	2,509 2 1	9	31	3	4,221 3 11	4	374 15 1	7,105 5 1
70	Tinnevelly.	Sermadevi circle	...	..	...		1	400 0 0	4	3	1	1,290 2 2	1	81 0 0	1,771 2 2
71		Srīvaikuntam do.	...	..	1	...	.	640 0 0	3	5	1	1,319 1 0	1	95 6 0	2,054 7 0
72		Koilpatti do.	...	...	...	1	...	720 0 0	1	4	3	1,357 2 4	1	96 9 9	2,173 12 1
		Total of district	...	...	1	1	1	1,760 0 0	8	12	5	3,966 5 6	3	272 15 9	5,999 5 3
73	Trichinopoly.	Trichinopoly circle	...	...	1	...	...	840 0 0	3	9	2	2,392 7 9	1	102 0 0	3,334 7 9
74		Ariyalūr do.	...	...	...	1	...	722 0 2	4	4	2	1,631 8 6	1	102 0 0	2,455 8 8
75		Nāmakkal do.	...	...	...	...	1	475 12 0	4	5	1	1,701 9 2	1	109 12 0	2,287 1 2
		Total of district	...	...	1	1	1	2,037 12 2	11	18	5	5,725 9 5	3	313 12 0	8,077 1 7
76	Vizagapatam.	Gunupur circle	...	...	...	...	1	495 0 0	1	7	1	1,260 14 11	1	95 0 0	1,850 14 11
77		Vizagapatam circle	...	...	...	1	...	547 10 7	5	7	2	2,011 4 11	1	86 0 0	2,644 15 6
		Government vaccinators (Gudem Hills)	...	...	...	...	...	...	...	1	...	131 0 0	...	...	131 0 0
78		Vizianagram circle	...	...	.	...	1	480 0 0	4	9	1	1,942 2 0	1	91 0 0	2,513 2 0
79		Pārvatīpuram do.	...	...	...	...	1	640 0 0	4	9	1	1,752 0 1	1	89 0 0	2,481 0 1
		Total of district	...	...	...	1	3	2,162 10 7	14	33	5	7,097 5 11	4	361 0 0	9,621 0 6
80	Koraput.	Jeypore circle	...	...	...	1	...	750 0 0	1	6	4	1,051 15 6	1	96 0 0	1,897 15 6
81		Koraput do.	...	...	...	1	...	900 0 0	1	7	...	1,032 12 4	1	101 14 10	2,034 11 2
		Total of district	...	...	..	2	...	1,650 0 0	2	13	4	2,084 11 10	2	197 14 10	3,932 10 8
		Grand total of districts	2	10,538 14 8	21	23	36	53,431 7 11	202	398	118	1,18,412 14 5	80	7,729 1 6	1,90,112 6 6

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency for the official year 1913-14*—continued.

Number.	Districts	Circles.	Expenditure—*cont.* Travelling allowance.	Contingencies.*	Total cost.*	Paid from Imperial funds.	Provincial funds.	Local funds.*	Municipal funds.	Total.*	Number of all successful primary vaccination and re-vaccination.	Average cost of each successful case.
			17	18	19	20	21	22	23	24	25	26
			RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
40	Malabar.	Tellicherry circle	1,010 13 8	1,331 0 3	5,144 10 7	...	1,779 13 0	3,364 13 7		5,144 10 7	25,549	0 3 3
41		Calicut do.	1,096 5 1	1,175 15 11	4,499 12 8	...	1,195 6 3	3,304 6 5	...	4,499 12 8	35,736	0 2 0
42		Palghat do.	1,362 3 8	1,843 4 1	6,036 4 1	...	1,554 14 3	4,481 5 10	...	6,036 4 1	40,483	0 2 5
43		Malappuram circle	1,143 12 3	1,715 5 2	5,009 12 6	...	1,288 11 3	3,721 1 3	...	5,009 12 6	32,909	0 2 5
		Total of district ...	4,613 2 8	6,065 9 5	20,690 7 10	...	5,818 12 9	14,871 11 1	...	20,690 7 10	134,677	0 2 5
44	Nellore.	Kavali	445 1 0	498 0 1	3,649 3 5	...	1,450 3 1	2,199 0 4	...	3,649 3 5	13,650	0 4 3
45		Gudur	833 8 7	549 3 7	4,196 4 11	...	1,430 4 0	2,766 0 11	...	4,196 4 11	13,928	0 4 10
46		Kanigiri	565 11 3	526 10 7	3,203 14 4	...	855 5 6	2,348 8 10	...	3,203 14 4	12,194	0 4 2
		Total of district ...	1,844 4 10	1,573 14 3	11,049 6 8	...	3,735 12 7	7,313 10 1	...	11,049 6 8	39,772	0 4 5
47	Nilgiris.	Nilgiris circle	770 10 0	314 9 0	2,951 5 0	...	1,744 5 0	1,207 0 0	...	2,951 5 0	42,50	0 11 1
		Total of district ...	770 10 0	314 9 0	2,951 5 0	...	1,744 5 0	1,207 0 0	...	2,951 5 0	4,250	0 11 1
48	North Arcot.	Vellore circle	881 6 8	524 13 0	2,673 6 9	...	1,248 8 11	1,424 13 10	...	2,673 6 9	12,880	0 3 4
49		Rānipēttai do.	895 9 4	551 9 0	3,209 9 7	...	1,599 6 5	1,610 3 2	...	3,209 9 7	12,844	0 4 0
50		Polur do.	677 6 11	517 9 0	2,481 14 1	...	1,019 12 1	1,462 2 0	...	2,481 14 1	10,713	0 3 8
51		Tiruppattūr do.	667 4 9	760 7 6	4,405 13 1	...	1,588 2 5	2,817 10 8	...	4,405 13 1	15,668	0 4 6
		Total of district ...	3,121 11 8	2,354 6 6	12,770 11 6	...	5,455 13 10	7,314 13 8	...	12,770 11 6	52,105	0 3 11
52	Rāmnād.	Srīvilliputtūr circle	732 8 5	553 6 7	3,662 3 0	...	1,328 1 9	2,334 1 3	...	3,662 3 0	16,623	0 3 6
53		Paramagudi do.	297 10 0	736 5 5	4,017 9 11	...	1,179 13 6	2,837 12 5	...	4,017 9 11	18,870	0 3 5
54		Tiruppattūr do.	765 5 11	817 14 2	4,103 5 2	...	1,198 6 3	2,904 14 11	...	4,103 5 2	18,558	0 3 6
		Total of district ...	1,795 8 4	2,107 10 2	11,783 2 1	...	3,706 5 6	8,076 12 7	...	11,783 2 1	54,051	0 3 6

Number.	Districts	Circles.	17	18	19	20	21	22	23	24	25	26
55	Salem.	Salem circle	418 5 4	715 12 10	2,986 0 1	...	1,188 1 5	1,797 14 8	...	2,986 0 1	14,977	0 3 2
56		Sankari do.	598 1 1	1,174 1 8	3,963 14 2	..	1,017 9 8	2,946 4 6	...	3,963 14 2	24,845	0 2 7
57		Hosūr do.	464 0 11	893 9 2	3,382 11 9	...	801 9 0	2,581 2 9	...	3,382 11 9	22,234	0 2 5
		Total of district ...	1,480 7 4	2,783 7 8	10,332 10 0	...	3,007 4 1	7,325 5 11	...	10,332 10 0	62,056	0 2 8
58	South Arcot.	Cuddalore circle	879 15 4	633 15 2	3,538 5 4	...	1,253 10 9	2,284 10 7	...	3,538 5 4	11,340	0 5 0
59		Vriddhāchalam do.	627 10 4	542 0 9	2,831 0 10	...	1,124 3 3	1,706 13 7	...	2,831 0 10	14,478	0 3 2
60		Tirukkōyilūr do.	624 0 2	495 13 11	2,655 15 5	...	984 4 3	1,671 11 2	...	2,655 15 5	13,132	0 3 3
61		Tindivanam do.	486 5 5	719 10 7	3,714 1 11	...	1,439 8 8	2,274 9 3	...	3,714 1 11	14,431	0 4 1
62		Villupuram do.	445 8 6	499 8 6	2,486 4 3	...	1,098 15 10	1,387 4 5	...	2,486 4 3	11,405	0 3 6
		Total of district ...	3,063 7 9	2,891 0 11	15,225 11 9	...	5,900 10 9	9,325 1 0	...	15,225 11 9	64,786	0 3 9
63	South Canara.	Northern circle	881 0 0	574 9 11	4,473 13 4	...	1,454 14 10	3,018 14 6	...	4,473 13 4	15,614	0 4 7
64		Central do.	960 0 0	434 6 6	4,105 3 9	...	1,477 6 7	2,627 13 2	...	4,105 3 9	12,936	0 5 1
65		Southern do.	999 6 2	637 0 7	4,014 8 5	...	1,193 9 8	2,820 14 9	..	4,014 8 5	13,831	0 4 8
		Total of district ...	2,840 6 2	1,646 1 0	12,593 9 6	...	4,125 15 1	8,467 10 5	...	12,593 9 6	42,381	0 4 9
66	Tanjore.	Tanjore circle	252 1 9	470 2 3	2,324 10 7	...	1,031 0 8	1,293 9 11	...	2,324 10 7	10,005	0 3 9
67		Negapatam do.	309 6 3	667 1 9	3,118 14 4	...	1,247 4 3	1,871 10 1	...	3,118 14 4	15,822	0 3 2
68		Pattukkōttai do.	275 9 9	797 0 6	2,766 15 7	...	922 8 8	1,844 6 11	...	2,766 15 7	13,122	0 3 4
69		Kumbakōnam do.	220 15 6	701 11 3	2,588 13 7	...	797 1 7	1,791 12 0	...	2,588 13 7	14,747	0 2 4
		Total of district ...	1,058 1 3	2,635 15 9	10,799 6 1	...	3,997 15 2	6,801 6 11	...	10,799 6 1	53,696	0 3 3
70	Tinnevelly.	Sermadevi circle	473 14 3	646 0 0	2,891 0 5	...	704 12 2	2,186 4 3	...	2,891 0 5	19,810	0 2 4
71		Srīvaikuntam do.	576 12 1	672 9 0	3,303 12 1	...	1,054 12 5	2,248 15 8	...	3,303 12 1	22,154	0 2 5
72		Koilpatti do.	383 2 11	612 2 3	3,169 1 3	...	1,245 14 0	1,923 3 3	...	3,169 1 3	20,459	0 2 6
		Total of district ...	1,433 13 3	1,930 11 3	9,363 13 9	...	3,005 6 7	6,358 7 2	...	9,363 13 9	62,423	0 2 5
73	Trichinopoly.	Trichinopoly circle	810 6 5	1,164 9 7	5,309 7 9	...	1,463 11 0	3,845 12 9	...	5,309 7 9	23,887	0 3 7
74		Ariyalūr do.	593 11 7	865 0 1	3,914 4 4	...	1,244 0 11	2,670 3 5	...	3,914 4 4	14,717	0 4 3
75		Nāmakkal do.	597 5 6	1,135 0 11	4,019 7 7	...	1,013 14 0	3,005 9 7	...	4,019 7 7	20,255	0 3 2
		Total of district ...	2,001 7 6	3,164 10 7	13,243 3 8	...	3,721 9 11	9,521 9 9	...	13,243 3 8	58,859	0 3 7
76	Vizagapatam.	Gunupur circle	1,337 9 0	457 11 6	3,646 3 5	...	929 3 0	2,717 0 5	...	3,646 3 5	9,138	0 6 5
77		Vizagapatam circle	740 14 9	1,097 3 6	4,483 1 9	...	1,040 2 2	3,442 15 7	...	4,483 1 9	25,707	0 2 9
		Government vaccinators (Gudem hills).	134 8 0	122 2 6	387 10 6	...	387 10 6	...	...	387 10 6	571	0 10 10
78		Vizianagram circle	582 9 6	1,753 5 1	4,849 0 7	...	812 9 0	4,036 7 7	...	4,849 0 7	32,734	0 2 4
79		Pārvatīpuram do.	784 14 0	1,045 8 6	4,311 6 7	...	1,312 6 3	2,999 0 4	...	4,311 6 7	22,090	0 3 1
		Total of district ...	3,580 7 3	4,475 15 1	17,677 6 10	...	4,481 14 11	13,195 7 11	...	17,677 6 10	90,240	0 3 2
80	Koraput.	Jeypore circle	868 8 7	766 3 8	3,532 11 9	...	1,457 0 8	2,075 11 1	...	3,532 11 9	15,572	0 3 7
81		Koraput do.	896 13 11	691 7 5	3,623 0 6	...	1,618 7 4	2,004 9 2	...	3,623 0 6	9,366	0 6 2
		Total of district ...	1,765 6 6	1,457 11 1	7,155 12 3	...	3,075 8 0	4,080 4 3	...	7,155 12 3	24,938	0 4 7
		Grand Total of districts ...	58,745 12 4	60,242 0 0	3,09,100 2 10	..	1,16,042 4 9	1,93,057 14 1	...	3,09,100 2 10	13,15,494	0 3 9

* Includes cost of lymph supplied by King Institute of Preventive Medicine during 1913-1914.

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency during the official year 1913–14*—continued.

Number.	Municipalities.	Inspector of Vaccination and Deputy Sanitary Commissioner.	Pay.	Deputy Inspectors. First grade.	Deputy Inspectors. Second grade.	Deputy Inspectors. Third grade.	Deputy Inspectors. Pay.	Vaccinators. First class.	Vaccinators. Second class.	Vaccinators. Probationers.	Vaccinators. Pay.	Peons, etc. Number.	Peons, etc. Pay.	Total pay of establishment.
1	2, 3	4	5	6	7	8	9	10	11	12	13	14	15	16
			RS. A. P.				RS. A. P.				RS. A. P.		RS. A. P.	RS. A. P.
1	Adōni	...	...	...	...	...	...	1	...	...	216 0 0	...	...	216 0 0
2	Anantapur	...	...	...	...	...	...	1	...	...	120 0 0	...	...	120 0 0
3	Anakāpalle	...	...	...	...	...	...	...	1	...	175 0 0	...	...	175 0 0
4	Bellary	...	...	...	...	...	...	2	1	...	593 2 1	...	...	593 2 1
5	Berhampur	...	...	...	...	...	...	1	...	...	240 0 0	...	...	240 0 0
6	Bezwada	...	...	...	...	...	...	1	...	...	257 6 2	1	95 0 0	352 6 2
7	Bimlipatam	...	...	...	...	...	...	...	1	...	210 0 0	...	...	210 0 0
8	Calicut	...	...	...	...	...	...	1	2	1	516 15 1	...	...	516 15 1
9	Cannanore	...	...	...	...	...	...	1	...	...	240 0 0	...	...	240 0 0
10	Chicacole	...	...	...	...	...	...	1	...	...	239 0 0	...	...	239 0 0
11	Chidambaram	...	...	...	...	...	...	1	...	...	218 0 0	...	...	218 0 0
12	Chingleput	...	...	...	...	...	...	...	1	...	140 8 0	...	...	140 8 0
13	Cochin	...	...	...	...	...	...	1	...	...	209 11 9	...	...	209 11 9
14	Cocanada	...	...	...	...	...	...	1	1	...	451 4 3	...	...	451 4 3
15	Coimbatore	...	...	...	...	...	...	3	...	...	355 5 2	...	...	355 5 2
16	Conjeeveram	...	...	...	...	...	...	...	3	...	421 8 0	...	...	421 8 0
17	Coonoor	...	...	...	...	...	...	1	...	...	219 0 0	...	...	219 0 0
18	Cuddalore	...	...	...	...	...	...	1	1	...	408 0 0	...	...	408 0 0
19	Cuddapah	...	...	...	...	...	...	...	1	...	156 0 0	...	...	156 0 0
20	Dindigul	...	...	...	...	...	...	1	...	...	192 0 0	...	...	192 0 0
21	Ellore	...	...	...	...	...	...	1	1	...	360 0 0	...	...	360 0 0
22	Erode	...	...	...	...	...	...	1	...	...	216 0 0	...	...	216 0 0
23	Gudiyāttam	...	...	...	...	...	...	...	1	...	123 0 0	...	...	123 0 0
24	Guntūr	...	...	...	...	...	...	3	...	1	325 9 9	...	...	325 9 9
25	Hospet	...	...	...	...	...	...	...	...	1	100 10 8	...	...	100 10 8
26	Karūr	...	...	...	...	...	...	1	...	...	231 0 0	...	...	231 0 0
27	Kodaikānal	...	...	...	...	...	...	...	1	...	60 0 0	1	30 0 0	90 0 0
28	Kumbakōnam	...	...	...	...	...	...	1	2	...	573 0 0	...	...	573 0 0
29	Kurnool	...	...	...	...	...	...	1	...	...	236 0 0	...	...	236 0 0
30	Madras	...	...	*1	*3	...	869 5 10	‡10	...	§2	9,192 12 3	11	951 14 3	11,014 0 4
31	Madura	...	...	...	...	...	...	1	3	...	686 13 1	...	...	686 13 1
32	Mannārgudi	...	...	...	...	...	...	...	1	...	135 9 0	...	...	135 9 0
33	Mangalore	...	...	...	...	...	...	1	...	...	591 2 9	1	93 0 0	684 2 9
34	Masulipatam	...	...	...	...	...	...	1	1	...	281 3 2	...	...	281 3 2
35	Māyavaram	...	...	...	...	...	...	1	...	...	198 0 0	...	...	198 0 0
36	Nandyal	...	...	...	...	...	...	1	...	...	154 5 2	1	7 10 8	161 15 10
37	Negapatam	...	...	...	...	...	...	1	2	...	540 7 3	...	...	540 7 3
38	Nellore	...	...	...	...	...	...	1	...	...	248 5 5	...	...	248 5 5
39	Ongole	...	...	...	...	...	...	1	...	...	192 0 0	...	...	192 0 0
40	Ootacamund	...	...	...	...	...	...	1	1	...	211 3 8	...	...	211 3 8
41	Palamcottah	...	...	...	...	...	...	1	1	...	370 13 11	1	82 0 0	452 13 11
42	Palghat	...	...	...	...	...	...	1	1	...	356 5 0	...	...	356 5 0
43	Parlākimedi	...	...	...	...	...	...	1	...	...	239 0 0	...	...	239 0 0
44	Periyakulam	...	...	...	...	...	...	...	1	...	166 0 0	...	...	166 0 0
45	Palni	...	...	...	...	...	...	1	...	...	177 15 4	...	...	177 15 4
46	Rajahmundry	...	...	...	...	...	...	1	1	...	347 0 0	...	...	347 0 0
47	Salem	...	...	...	...	...	...	1	1	...	372 0 0	...	...	372 0 0
48	Srirangam	...	...	...	...	...	...	1	...	...	236 0 0	...	...	236 0 0
49	Srivilliputtūr	...	...	...	...	...	...	1	...	...	121 14 3	...	...	121 14 3
50	Tanjore	...	...	...	...	...	...	...	3	...	306 9 0	...	...	306 9 0
51	Tellicherry	...	...	...	...	...	...	...	1	‖1	292 0 0	1	72 0 0	364 0 0
52	Tenali	...	...	...	...	...	...	...	1	...	147 0 0	...	...	147 0 0
53	Tinnevelly	...	...	...	...	...	...	1	1	...	375 12 5	1	81 0 0	456 12 5
54	Trichinopoly	...	...	...	...	...	...	1	1	‖1	445 2 1	...	...	445 2 1
55	Tiruppattūr	...	...	...	...	...	...	1	...	...	192 0 0	...	...	192 0 0
56	Tirupati	...	...	...	...	...	...	1	...	...	180 0 0	...	...	180 0 0
57	Tiruvannāmalai	...	...	...	...	...	...	1	...	...	186 0 0	...	...	186 0 0
58	Tuticorin	...	...	...	...	...	...	3	...	...	371 15 0	2	102 10 1	474 9 1
59	Vāniyambādi	...	...	...	...	...	...	1	...	...	104 13 5	...	...	104 13 5
60	Vellore	...	...	...	...	...	...	2	...	...	454 0 10	...	...	454 0 10
61	Vizagapatam	...	...	...	...	...	...	1	1	...	349 15 5	...	...	349 15 5
62	Vizianagram	...	...	...	...	...	...	1	1	...	313 6 0	...	...	313 6 0
63	Wālājāpet	...	...	...	...	...	...	...	1	...	132 0 0	...	...	132 0 0
	Total of municipalities ...	...	...	*1	0	*3	869 5 10	66	41	7	26,473 9 4	20	1,515 3 0	28,858 2 2
1	Military Cantonments. Bangalore	...	...	...	...	...	...	1	1	...	336 0 0	...	...	336 0 0
2	Military Cantonments. Secunderabad	...	...	1	...	...	840 0 0	1	3	...	851 7 3	4	282 5 5	1,973 12 8
	Total ...	...	...	1	...	...	840 0 0	2	4	...	1,187 7 3	4	282 5 5	2,309 12 8
	Grand total ...	2	10,538 14 8	23	23	39†	55,140 13 9	270	443	125	1,46,073 15 0	104	9,526 9 11	2,21,280 5 4

* One Deputy Inspector of Vaccination was in service only from April to September 1913 and the three Assistant Deputy Inspectors were in service from April to July 1913. During the remainder of the official year, the Assistant Health Officer was in charge of the department in which there is no Deputy Inspector working.

† Includes 3 Assistant Deputy Inspectors employed in the Corporation of Madras. ‡ Medical Vaccinators. § Clerks. ‖ Vaccinatrix.

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency for the official year 1913–14*—continued.

Number.	Municipalities.	—	Expenditure—*cont.* Travelling allowance.	Contingencies.*	Total cost.*	Paid from Imperial funds.	Provincial funds.	Local funds.	Municipal funds.*	Total.*	Number of all successful primary vaccination and re-vaccination.	Average cost of each successful case.
			17	18	19	20	21	22	23	24	25	26
			RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
1	Municipalities.	Ādōni	...	79 5 4	295 5 4	...	...	...	295 5 5	295 5 4	1,337	0 3 6
2		Anantapur	...	10 3 4	130 3 4	...	...	...	130 3 4	130 3 4	350	0 5 11
3		Anakāpalle	...	36 11 6	211 11 6	...	...	...	211 11 6	211 11 6	879	0 3 10
4		Bellary	...	126 3 7	719 5 8	...	...	...	719 5 8	719 5 8	3,396	0 3 5
5		Berhampur	...	49 2 6	289 2 6	...	...	...	289 2 6	289 2 6	1,377	0 3 4
6		Bezwada	...	77 2 6	429 8 8	...	...	...	429 8 8	429 8 8	2,302	0 3 0
7		Bimlipatam	...	19 8 2	229 8 2	...	...	...	229 8 2	229 8 2	524	0 7 0
8		Calicut	...	362 3 1	879 2 2	...	...	...	879 2 2	879 2 2	6,628	0 2 1
9		Cannanore	...	109 5 4	349 5 4	...	...	...	349 5 4	349 5 4	1,473	0 3 9
10		Chicacole	...	35 2 6	274 2 6	...	...	...	274 2 6	274 2 6	1,027	0 3 2
11		Chidambaram	...	50 8 8	268 8 8	...	...	...	268 8 8	268 8 8	716	0 6 0
12		Chingleput	...	56 5 10	196 13 10	...	...	...	196 13 10	196 13 10	623	0 5 1
13		Cochin	...	44 7 1	254 2 10	...	...	...	254 2 10	254 2 10	1,225	0 3 4
14		Cocanada	...	317 9 6	768 13 9	...	...	...	768 13 9	768 13 9	1,691	0 7 3
15		Coimbatore	...	98 14 0	454 3 2	...	...	...	454 3 2	454 3 2	1,640	0 4 5
16		Conjeeveram	...	116 12 7	538 4 7	...	...	...	538 4 7	538 4 7	2,016	0 4 3
17		Coonoor	...	47 1 7	266 1 7	...	...	...	266 1 7	266 1 7	595	0 7 2
18		Cuddalore	...	154 2 9	562 2 9	...	...	...	562 2 9	562 2 9	2,337	0 3 10
19		Cuddapah	...	36 14 10	192 14 10	...	...	...	192 14 0	192 14 10	731	0 4 3
20		Dindigul	...	30 4 0	222 4 0	...	...	...	222 4 0	222 4 0	1,136	0 3 2
21		Ellore	...	171 7 7	531 7 7	...	...	...	531 7 7	531 7 7	3,324	0 2 7
22		Erode	...	50 8 3	266 8 3	...	...	...	266 8 3	266 8 3	891	0 4 9
23		Gudiyāttam	...	51 6 0	174 6 0	...	...	...	174 6 0	174 6 0	728	0 3 10
24		Guntūr	4 13 6	203 15 9	534 7 0	...	...	...	534 7 0	534 7 0	5,128	0 1
25		Hospet	...	44 15 4	145 10 0	...	...	...	145 10 0	145 10 0	839	0 2 9
26		Karūr	...	61 2 4	292 2 4	...	...	...	292 2 4	292 2 4	760	0 6 2
27		Kodaikānal	...	6 0 10	96 0 10	...	...	...	96 0 10	96 0 10	128	0 12 0
28		Kumbakōnam	...	108 14 1	681 14 1	...	...	...	681 14 1	681 14 1	1,915	0 5 8
29		Kurnool	...	40 7 10	276 7 10	...	...	...	276 7 10	276 7 10	1,288	0 3 5
30		Madras	153 5 10	4,218 3 3	15,385 9 5	...	...	...	15,385 9 5	15,385 9 5	22,150	0 11 1
31		Madura	...	404 13 8	1,091 10 9	...	...	...	1,091 10 9	1,091 10 9	8,141	0 2 2
32		Mannārgudi	...	45 3 2	180 12 2	...	...	...	180 12 2	180 12 2	811	0 3 7
33		Mangalore	...	121 4 3	805 7 0	...	...	...	805 7 0	805 7 0	2,576	0 5 0
34		Masulipatam	...	159 11 9	440 14 11	...	...	...	440 14 11	440 14 11	1,490	0 4 9
35		Māyavaram	...	35 14 9	233 14 9	...	...	...	233 14 9	233 14 9	1,254	0 3 0
36		Nandyal	...	25 3 4	187 3 2	...	...	...	187 3 2	187 3 2	562	0 5 4
37		Negapatam	...	230 12 1	771 3 4	...	...	...	771 3 4	771 3 4	3,705	0 3 4
38		Nellore	...	47 3 10	295 9 3	...	...	...	295 9 3	295 9 3	1,200	0 3 11
39		Ongole	...	56 8 5	248 8 5	...	...	...	248 8 5	248 8 5	1,344	0 2 11
40		Ootacamund	...	† 43 15 8	† 255 3 4	...	...	...	* 255 3 4	* 255 3 4	1,290	0 3 2
41		Palamcottah	...	70 14 6	523 12 5	...	...	...	523 12 5	523 12 5	1,933	0 4 4
42		Palghat	...	129 8 7	485 13 7	...	...	...	485 13 7	485 13 7	2,137	0 3 8
43		Parlākimedi	...	34 3 11	273 3 11	...	...	...	273 3 11	273 3 11	1,018	0 4 3
44		Periyakulam	...	24 3 2	190 3 2	...	...	...	190 3 2	190 3 2	811	0 3 0
45		Palni	...	24 3 2	202 2 6	...	...	...	202 2 6	202 2 6	964	0 3 4
46		Rajahmundry	...	83 12 7	430 12 7	...	...	...	430 12 7	430 12 7	2,809	0 2 5
47		Salem	...	256 7 5	628 7 5	...	...	...	628 7 5	628 7 5	3,300	0 3 1
48		Srirangam	...	66 4 4	302 4 4	...	...	...	302 4 4	302 4 4	1,203	0 4 0
49		Srīvilliputtūr	...	27 11 8	149 9 11	...	...	...	149 9 11	149 9 11	1,095	0 2 2
50		Tanjore	...	161 5 3	467 14 3	...	...	...	467 14 3	467 14 3	3,333	0 2 3
51		Tellicherry	...	‡ 14 2 1	‡ 378 2 1	...	...	...	† 378 2 1	† 378 2 1	1,135	0 5 4
52		Tenali	...	43 8 0	190 8 0	...	...	...	190 8 0	190 8 0	940	0 3 3
53		Tinnevelly	...	152 10 10	609 7 3	...	...	...	609 7 3	609 7 3	2,233	0 4 4
54		Trichinopoly	...	383 1 5	828 3 6	...	...	...	828 3 6	828 3 6	5,931	0 2 3
55		Truppattūr	...	10 3 0	202 3 0	...	...	...	202 3 0	202 3 0	405	0 8 0
56		Tirupati	...	33 4 7	213 4 7	...	...	...	213 4 7	213 4 7	555	0 6 2
57		Tiruvannāmalai	...	23 7 1	209 7 1	...	...	...	209 7 1	209 7 1	836	0 4 0
58		Tuticorin	5 12 0	93 8 7	573 13 8	...	...	...	573 13 8	573 13 8	3,309	0 2 9
59		Vāniyambādi	...	30 7 8	135 5 1	...	...	...	135 5 1	135 5 1	570	0 3 9
60		Vellore	...	124 11 5	578 12 3	...	...	...	578 12 3	578 12 3	2,033	0 4 7
61		Vizagapatam	...	79 2 8	429 2 1	...	...	...	429 2 1	429 2 1	1,345	0 5 1
62		Vizianagram	...	§ 181 6 0	§ 494 12 0	...	...	...	494 12 0	494 12 0	2,918	0 2 9
63		Wālajāpet	...	12 11 8	144 11 8	...	...	...	144 11 8	144 11 8	431	0 5 4
		Total of Municipalities	163 15 4	10,046 12 5	39,068 13 11	...	...	...	39,068 13 11	39,068 13 11	132,771	0 4 8
1	Military Canton-ments.	Bangalore	240 0 0	...	576 0 0	576 0 0	...	...	...	576 0 0	1,119	0 8 3
2		Secunderabad	186 10 0	256 5 11	2,416 12 7	...	...	‖ 2,416 12 7	...	2,416 12 7	8,009	0 4 10
		Total	426 10 0	256 5 11	2,992 12 7	576 0 0	...	2,416 12 7	...	2,992 12 7	9,128	0 5 3
		Grand Total	59,336 5 8	70,545 2 4	3,51,161 13 4	576 0 0	1,16,042 4 9	1,95,474 10 8	39,068 13 11	3,51,161 13 4	1,457,393	0 3 10

* Includes cost of lymph supplied by King Institute of Preventive Medicine during 1913–14.
† Excludes Rs 54–1–0 being the amount realized by vaccinating children at their houses.
‡ Do. Rs. 66–0–0 do. do.
§ Do. Rs. 31–12–0 do. do.

N.B.—The average cost of each successful case was calculated on the total number of successful vaccinations and re-vaccinations performed by the Special Staff only, viz., Local Fund, Government, Municipal and Cantonment staffs—(*vide* G.O. Mis. No. 1158 L., dated 4th September 1911).

‖ Paid from Local Abkāri &c. Funds.

B—DISPENSARY VACCINATION.

STATEMENT No. III—*Showing Dispensary Vaccination in the Madras Presidency for the official year 1913–1914.*

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.					Re-vaccination.			Percentage of successful cases in which the results were known.		Percentage of unknown cases to total operations.	
					Total number of operations.	Successful.			Unknown.	Total number of operations.	Successful.	Unknown.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.
						Under one year.	Over one and under six years.	Total of all ages.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Anantapur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bellary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chingleput	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chittoor	...	...	5	...	5	...	...	5	...	...	...	...	100·0	...	...	...
Coimbatore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ganjām	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gōdāvari	...	...	40	...	1	...	...	1	...	39	10	28	100·0	90·9	...	71·8
Guntūr	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kistna	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madras	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malabar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nellore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nilgiris	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rāmnād	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Canara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tanjore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vizagapatam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Korapat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	45	...	6	...	...	6	...	39	10	28	100·0	90·9	...	71·8

Difference between number of operations and number of persons vaccinated equals *nil*.

Statement No. IV—*Showing the number of persons primarily vaccinated and the number of those persons who were successfully vaccinated in the Madras Presidency in each of the undermentioned years.*

—	Persons primarily vaccinated.																			
	1904-1905.		1905-1906.		1906-1907.		1907-1908.		1908-1909.		1909-1910.		1910-1911.		1911-1912.		1912-1913.		1913-1914.	
	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	* Total number.	* Numbers uccessfully vaccinated.	* Total number.	* Number successfully vaccinated.
Government vaccinators ...	28,633	25,469	29,645	24,797	19,958	18,054	12,948	11,557	12,478	11,319	12,448	11,758	11,214	10,270	11,897	10,545	15,646	13,254	17,492	17,015
Local Fund do. ...	1,073,284	949,554	1,235,839	1,039,929	1,207,394	1,081,374	1,309,814	1,176,323	1,373,883	1,265,809	1,319,314	1,163,628	1,240,602	1,027,398	1,328,350	1,133,151	1,277,687	1,118,543	1,335,023	1,223,066
Cantonment do. ...	5,000	4,813	4,832	4,602	5,041	4,892	4,687	4,542	5,164	5,072	4,134	4,023	4,187	3,963	3,606	3,421	4,821	4,681	5,021	4,916
Zamindari do. ...	12,191	9,823	13,914	10,385	4,356	3,989	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Municipal do. ...	109,918	105,258	111,455	103,242	116,654	110,989	108,261	102,615	110,669	106,433	111,045	105,198	111,754	102,748	111,070	103,028	103,170	99,018	110,076	106,611
Dispensaries	8,889	7,563	8,934	7,014	1,304	1,024	93	78	129	120	18	18	5	5	65	60	17	11	6	6
Medical subordinates ...	2,740	1,960	2,370	1,834	3,038	2,280	2,121	1,558	1,045	758	369	214	411	229	497	322	206	118	139	114
Total .	1,240,655	1,104,440	1,406,989	1,191,803	1,357,745	1,222,602	1,437,924	1,296,673	1,503,368	1,389,511	1,447,328	1,284,839	1,368,173	1,144,613	1,455,485	1,250,527	1,401,547	1,235,625	1,467,757	1,351,748

* As per G.O. Mis. No. 1158 L., dated 4th September 1911.

STATEMENT No. V—*Showing Particulars of Vaccination verified by Inspecting Officers during 1913-14.*

Districts.	Total number of persons vaccinated.		Total number inspected						Percentage of inspection to total number vaccinated.						Percentage of cases found successful to total number inspected.						Percentage of success as reported by Vaccinators.	
			By District Medical and Sanitary Officers and Civil Surgeons.		By Deputy Inspectors of Vaccination.		By Sanitary Assistants to District Medical and Sanitary Officers.		By District Medical and Sanitary Officers and Civil Surgeons.		By Deputy Inspectors of Vaccination.		By Sanitary Assistants to District Medical and Sanitary Officers.		By District Medical and Sanitary Officers and Civil Surgeons.		By Deputy Inspectors of Vaccination.		By Sanitary Assistants to District Medical and Sanitary Officers.			
	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.
Anantapur	28,109	1,315	523	75	17,085	259	...	...	1·9	5·7	60·8	19·7	...	...	89·3	70·7	86·2	73·4	...	...	93·7	88·5
Bellary	33,992	37,43	82	710	23,473	272	...	...	0·2	19·0	69·1	7·3	...	...	100·0	55·5	88·4	84·2	...	...	97·7	82·3
Chingleput	48,856	2,094	726	...	38,245	1,361	...	...	1·5	...	78·3	65·0	..	...	93 5	...	92·3	48·1	...	...	85·0	54·8
Chittoor	32,853	1,427	...	..	19,618	893	...	...	...	...	59·7	62·6	...	...	..	..	85·6	47·9	...	...	91·8	65·3
Coimbatore	73,699	7,529	3	546	43,010	2,834	...	...	0·004	7·3	58.4	37·6	...	...	100·0	50·9	73·7	47·1	...	...	77·6	55·6
Cuddapah	31,874	1,025	505	260	21,703	126	...	...	1·6	25·4	68·1	12·3	...	...	89·5	53·1	71·1	46·8	...	...	92·5	75·2
Ganjām	78,955	6,112	1,519	828	61,625	2,196	...	...	1·9	13 5	78·1	35·9	...	...	96·5	98·4	90·3	66·0	...	...	94·9	90·1
Gōdāvari	67,340	6,480	444	106	57,937	2,182	1,649	...	0·7	1·6	86·0	33·7	2·4	...	89·9	41·5	74·0	70·9	81·9	...	84·5	73·5
Kistna	83,426	3,539	2,375	...	64,546	431	...	...	2·8	...	77·4	12·2	...	...	100·0	...	86·8	87·5	...	...	92·8	83·8
Guntūr	62,935	26 256	356	..	33,952	3,580	2,720	336	0·6	...	53·9	13·6	4·3	1·3	98·3	...	84·7	84·1	99·5	66·1	92·2	88·6
Kurnool	32,972	3,124	1,062	125	21,971	695	...	...	3·2	4·0	66·6	22·2	...	...	97·9	63·2	78·1	48·2	...	...	96·7	85·2
Madras	20,755	4 410	...	...	*	*	...	...	...	...	*	*	...	...	...	...	...	...	...	...	98·1	59·2
Madura	65,202	4,050	...	...	49,860	1,380	...	...	...	...	76·5	34·1	...	...	...	...	83·0	48·8	...	...	87·3	70·9
Malabar	156,763	9,578	†2,316	†1,632	75,371	2,236	...	...	1·5	17·0	48·1	23·3	...	...	95·6	63·7	88·6	39·5	...	...	92·0	66·4
Nellore	41,954	2,597	458	142	36,140	941	...	...	1·1	5·5	86·1	36·2	...	...	98·7	58·4	77·3	65·7	...	...	89·2	72·5
Nilgiris, The ...	5,212	1,157	95	...	3,246	314	...	...	1·8	...	62·3	27·1	...	...	95·8	...	97·0	93·9	...	...	97·7	89·7
North Arcot ...	60,383	2,455	1,088	1	53,170	779	1,969	...	1·8	0·04	88·1	31·7	3·3	...	95·2	100·0	86·3	28·6	88·4	...	89·5	58·1
Rāmnād	55,473	1,119	245	79	41,183	219	...	...	0·4	7·1	74·2	19·5	...	...	92·7	94·9	94·2	74·9	...	...	98·2	93·1
Salem	62,197	4,690	2,367	931	36,214	1,396	...	...	3·8	19·8	58·2	29·8	...	...	100·0	78·4	85·8	65·8	...	...	94·2	86·9
South Arcot ...	75,996	[illegible],848	3	402	62,098	937	2,365	2	0·004	14·1	81·7	32·9	3·1	0·07	100·0	83·1	83·6	58·4	87·9	100·0	89·3	77·3
South Canara ...	40,874	8,113	2,720	520	25,183	2,410	...	...	6·7	6·4	61·6	29·7	...	...	99·1	89·2	91·1	73·5	...	...	93·9	82·8
Tanjore	60,706	5,618	4,555	1,674	44,265	2,422	2,157	110	7·5	29·8	72·9	43·1	3·6	2·0	99·0	85·7	92·0	76·8	97·2	100·0	96·9	90·4
Tinnevelly	66,379	6,238	1,369	394	48,059	2,189	...	...	2·1	6·3	72·4	35·1	...	...	96·6	89·9	89·6	88·0	...	...	95·2	95·8
Trichinopoly ...	69,234	2,738	3,918	561	53,422	1,324	...	...	5·7	20·5	77·2	48·4	...	...	98·1	87·3	86·9	63·7	...	...	95·0	83·4
Vizagapatam ...	82,165	23,363	90	6	45,787	10,574	...	...	0·08	0·02	55·7	45·3	...	...	97·8	100·0	78·2	76·9	...	...	93·5	89·0
Koraput	24,432	2,485			15,517	2,430	...	...			63·5	97·8	...	...			79·3	36·2	..	...	94·6	75·5
Total ...	‡1,462,736	‡1,44,100	26,819	8,992	9,92,680	44,380	10,860	448	1·8	6·2	67·9	30·8	0·7	0·3	97·7	75 8	84·6	66·5	91·8	74·6	91·8	81·8

* *Vide* footnote to appendix Statement No. VII.

† Includes cases verified by Sub.-Assistant Surgeons.

‡ Excludes cases performed in cantonments.

STATEMENT No. VI—*Showing the Number of Vaccinations performed in Municipal Towns on children under one year of age (G.O. Mis. No. 1534 L., dated 6th December 1909.)*

Municipalities.	Number of births available for vaccination during the year 1913–1914.	Number of deaths amongst children under one year during the year.	Number of successful vaccinations on children under one year during the year ending March 1914.	Date of extension of compulsory vaccination to municipalities.
1	2	3	4	5
Ādōni	1,455	226	655	1st Dec. 1886
Anantapur	306	66	92	1st Jan. 1886.
Anakāpalle	718	83	576	1st Nov. 1891.
Bellary	1,705	397	894	1st Jan. 1891.
Berhampur	874	188	379	15th April 1891.
Bezwada	1,140	274	643	1st May 1892.
Bimlipatam	309	31	182	1st Jan. 1894.
Calicut	2,982	403	1,805	1st Oct. 1891.
Cannanore	1,107	185	634	1st June 1891.
Chicacole	558	86	317	1st Dec. 1890.
Chidambaram	607	142	308	1st July 1887.
Chingleput	521	128	214	1st April 1897.
Cochin	701	149	672	1st Jan. 1894.
Cocanada	1,638	257	755	1st June 1890.
Coimbatore	2,026	444	751	1st Jan. 1889.
Conjeeveram	2,284	559	1,165	1st Jan. 1891.
Coonoor	386	51	79	1st April 1887.
Cuddalore	2,100	601	1,131	1st Aug. 1890.
Cuddapah	410	65	188	15th July 1886.
Dindigul	1,260	285	792	16th July 1888.
Ellore	1,940	602	1,144	1st June 1886.
Erode	636	121	366	1st April 1888.
Gudiyāttam	809	152	446	1st June 1891.
Guntūr	1,577	482	719	1st Jan. 1889
Hospet	458	40	225	*
Karūr	622	115	330	1st Sept. 1892.
Kodaikānal	104	12	86	1st April 1900.
Kumbakōnam	1,793	472	822	1st Aug. 1889.
Kurnool	1,124	266	608	1st July 1889.
Madura	4,947	1,390	3,417	1st Jan. 1891.
Mannārgudi	694	116	384	1st Dec. 1890.
Mangalore	1,524	201	1,136	1st Sept. 1891.
Masulipatam	1,254	239	614	1st May 1888
Māyavaram	917	246	455	1st Oct. 1886.
Nandyal	468	70	150	1st Jan. 1900
Negapatam	1,632	311	2,103	1st July 1886.
Nellore	1,070	218	456	1st Aug. 1886.
Ongole	510	98	270	1st Dec. 1885.
Ootacamund	771	123	395	1st July 1887.
Palamcottah	1,611	410	746	1st May 1886.
Palghat	1,771	386	1,117	1st Jan. 1883.
Parlākimedi	532	74	362	1st Dec. 1890.
Periyakulam	894	202	571	1st Feb. 1891.
Palni	661	182	371	1st Dec. 1891.
Rajahmundry	1,570	444	835	1st Jan. 1886.
Salem	3,331	672	2,507	1st May 1891.
Srīrangam	678	172	319	1st July 1888.
Srīvilliputtūr	1,293	253	895	1st Jan. 1896.
Tanjore	2,232	401	1,438	1st July 1893.
Tenali	532	149	249	1st April 1910.
Tellicherry	1,046	185	692	15th Jan. 1892.
Tinnevelly	1,949	600	1,042	1st July 1886.
Trichinopoly	4,070	977	2,162	1st Aug. 1890.
Tiruppattūr	549	94	295	1st April 1891.
Tirupati	482	93	310	1st Mar. 1890.
Tiruvannāmalai	840	158	623	15th Dec. 1897.
Tuticorin	1,446	371	884	1st May 1892.
Vāniyambādi	639	75	297	1st May 1889.
Vellore	2,122	389	1,240	1st Jan. 1897.
Vizagapatam	1,388	263	644	1st Aug. 1890.
Vizianagram	1,369	291	736	1st Jan. 1891.
Walajapet	399	67	284	20th June 1892.
Total	77,341	16,802	44,977	

* Was made compulsory from 1st April 1914.

STATEMENT No. VII—*Showing Inspection Work done by the Deputy Inspectors during the year 1913–14.*

District.	Circle.	Number of inspecting officers. First-grade Deputy Inspectors.	Second-grade Deputy Inspectors.	Third-grade Deputy Inspectors.	Number of villages visited. First-grade Deputy Inspectors.	Second-grade Deputy Inspectors.	Third-grade Deputy Inspectors.	Total number of cases vaccinated.	Number of days spent on Inspection duty.	Number of cases verified. First-grade Deputy Inspectors.	Second-grade Deputy Inspectors.	Third-grade Deputy Inspectors.	Total number of cases inspected by Deputy Inspectors of all sorts.	Total number of successful cases as reported by Deputy Inspectors.	Percentage of successful cases to the total number inspected as reported by Deputy Inspectors.	Proportion per cent. of inspection to total number vaccinated. First-grade Deputy Inspectors.	Second-grade Deputy Inspectors.	Third-grade Deputy Inspectors.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Anantapur.	Anantapur	...	...	1	...	...	323	14,196	262	...	...	9,497	9,497	8,770	92·3	...	...	66·9
	Penukonda	...	...	1	...	..	635	16,026	251	...	...	7,847	7,847	6,147	78·3	...	...	49·0
Bellary ...	Bellary	...	...	1	...	...	317	16,783	253	...	...	14,019	14,019	12,227	87·2	...	...	83·5
	Hospet	...	...	1	...	...	240	14,484	208	...	...	9,726	9,726	8,755	90·1	...	...	67·1
Chingleput	Chingleput	..	1	...	...	809	...	17,847	252	...	15,527	...	15,527	13,213	85·1	...	87·0	...
	Saidapet	1	...	...	629	...	...	15,910	255	13,612	...	...	13,612	10,829	79·6	85·6	...	...
	Ponnēri	1	...	...	829	...	...	15,975	253	10,467	...	...	10,467	8 101	77·4	65·5	...	...
Chittoor ...	Chittoor	...	1	...	...	944	...	14,918	202	...	9,559	...	9,559	7,590	79·4	...	64·1	...
	Karvetnagar	...	...	1	...	...	814	20,112	240	...	...	10,952	10,952	9,628	87·9	...	...	54·5
Coimbatore.	North Coimbatore ...	...	...	1	...	...	291	18,298	303	...	...	11,982	11,982	8,094	67·6	...	...	65·5
	South do. ...	...	1	...	...	250	...	12,619	265	...	8,808	...	8,808	7,928	90·0	...	69·8	...
	East do. ...	1	...	...	1,289	...	...	26,571	275	15,467	...	...	15,467	9,900	64·0	58·2	...	...
	Central do. ...	1	...	...	330	...	...	21,911	268	9,587	...	...	9,587	7,105	74·1	43·8	...	...
Cuddapah ...	Cuddapah	1	...	...	1,059	...	...	11,339	240	7,014	...	...	7,014	4,234	60·4	61·9	...	...
	Proddatur	...	...	1	...	...	207	10,502	238	...	...	7,840	7,840	5,503	70·2	...	...	74·7
	Sidhout	...	1	...	...	779	...	13,227	237	...	6,975	...	6,975	5,764	82·6	...	52·7	...
Ganjām ...	Berhampur	...	...	1	...	...	988	15,286	225	...	...	13,905	13,034	12,959	93·2	...	...	90·9
	Chicacole	...	1	...	...	980	...	13,358	215	...	11,566	...	11,566	10,632	91·1	...	86·6	...
	Ganjām Hill Tracts ...	...	...	1	...	...	598	15,965	184	...	...	8,170	8,170	6,947	85·0	...	...	51·2
	Aska	...	...	1	...	...	627	13,314	226	...	...	9,236	9,236	7,866	85·2	...	...	69·3
	Parlākimēdi	1	...	...	731	...	..	12,768	237	11,167	...	...	11,167	9,969	89·3	87·5	...	...
	Purushottapur	...	...	1	...	...	611	12,158	310	...	..	9,777	9,777	8,676	88·7	...	...	80·4
Gōdāvari ..	Cocanada	...	...	1	...	...	432	14,519	257	...	...	14,322	14,322	10,628	74·2	...	...	98·6
	Rajahmundry	...	...	1	...	...	269	24,183	200	...	...	15,441	15,441	11,010	71·3	...	...	63·9
	Polavaram	...	..	1	...	...	264	7,189	233	..	..	4,674	4,674	3,378	72·3	...	...	65·0
	Peddapur	...	...	1	...	..	378	20,922	290	...	...	22,390	22,390	17,298	77·3	...	...	* 107·0
	Bhadrāchalam	...	...	1	...	...	272	4,180	163	...	...	3,292	3,292	2,115	64·2	...	...	78·8

District.	Circle.	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Guntūr ...	Guntūr	1	...	...	195	...	...	29,075	213	13,969	...	...	13,969	11,917	85·3	48·0	...	..
	Narasaraopet	...	...	1	...	...	302	23,588	184	...	...	11,308	11,308	9,321	82·4	...	...	50·9
	Bāpatla	...	1	...	...	214	...	26,526	213	...	12,255	...	12,255	10,531	85·9	...	51·2	...
Kistna ...	Ellore	...	1	...	...	304	...	31,489	265	.	22,016	...	22,016	19,531	88·7	...	69·9	...
	Masulipatam	1	...	...	396	...	...	25,718	261	22,010	...	...	22,010	18,694	84·9	85·6	...	...
	Narasapur	...	1	...	...	284	..	25,064	283	...	20,951	...	20,951	18,152	86·6	...	83·5	...
Kurnool ..	Cumbum	1	...	...	378	...	...	16,083	215	9,502	...	...	9,502	7,079	74·5	59·1	...	...
	Kurnool	...	...	1	...	...	432	18,544	255	...	...	13,164	13,164	10,423	79·2	...	...	71·0
Madras ...	Madras †	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...
Madura ...	Dindigul	1	...	...	245	...	...	20,393	205	16,845	...	...	16,845	13,492	80·1	82·6	...	...
	Madura	...	1	...	...	1,274	...	18,575	285	...	15,282	..	15,282	11,064	72·4	...	82·3	...
	Usilampatti	1	...	...	316	...	..	21,586	211	19,113	...	...	19,113	17,505	91·6	88·5	...	..
Malabar ...	Tellicherry	1	...	..	225	...	..	29,928	244	16,218	...	...	16,218	13,455	82·9	54·2	...	...
	Calicut	...	...	1	...	...	107	39,082	220	...	...	19,393	19,393	16,959	87·4	...	..	49·6
	Palghat	...	1	...	...	534	...	46,053	268	...	24,716	...	24,716	22,096	89·4	...	53·7	...
	Malappuram	...	...	1	...	...	122	36,584	223	...	...	17,280	17,280	15,182	87·8	...	...	47·2
Nellore ...	Kavali	...	1	...	...	298	...	15,812	260	...	10,782	...	10,782	8,780	81·4	...	68·2	...
	Gudur	1	..	...	706	...	..	15,879	289	13,366	...	...	13,366	11,704	87·6	84·1	...	...
	Kanigiri	...	...	1	...	...	294	15,077	216	...	...	12,933	12,933	8,061	62·3	...	...	55·8
Nilgiris ...	The Nilgiris	...	...	1	...	...	539	4,363	244	...	...	3,560	3,560	3,453	97·0	...	...	81·6
North Arcot.	Vellore	...	...	1	...	...	496	14,704	227	...	...	13,698	13,698	12,562	91·7	...	...	93·2
	Rānipēttai	1	...	...	472	..	...	15,990	205	14,599	...	...	14,599	12,371	84·7	91·3	...	...
	Polur	...	...	1	...	...	389	14,781	203	...	...	13,230	13,230	10,288	77·8	...	..	89·4
	Tiruppattūr	...	1	...	...	501	...	18,065	251	...	12,422	...	12,422	10,902	87·8	...	68·8	...
Rāmnād ...	Srīvilliputtūr	1	...	...	434	...	..	17,480	259	15,260	..	...	15,260	14,328	93·9	87·3	...	...
	Paramagudi	...	1	...	...	445	...	19,439	239	...	14,025	...	14,025	13,169	93·9	...	72·1	...
	Tiruppattūr	...	1	...	...	505	...	18,848	211	...	12,117	...	12,117	11,478	94·7	...	64·3	...
Salem ...	Salem (Central) ...	1	...	...	261	...	...	16,667	200	10,648	..		10,648	8,912	83·7	63·9	...	...
	Sankēri	...	...	1	...	...	128	27,676	191	...	...	15,948	15,948	13,792	86·5	...	...	57·6
	Hosūr	...	...	1	...	.	448	23,411	230	...	...	11,014	11,014	9,277	84·2	...	...	47·0
South Arcot.	Cuddalore	...	1	...	...	830	...	16,570	179	...	13,452	..	13,452	10,954	81·4	...	81·2	...
	Vriddhāchalam	..	1	...	...	479	..	16,765	237	...	12,180		12,180	10,358	85·0	...	72·6	...
	Tirukkōyilūr	...	..	1	...	..	299	15,512	238	...	...	11,147	11,147	8,567	76·9	..	...	71·8
	Tindivanam	...	...	1	...	..	361	12,899	361	...	...	9,527	9,527	8,153	85·6	...	...	73·9
	Villupuram	1	...	...	787	...	...	18,997	239	16,729	...	...	16,729	14,431	86·3	88·1	...	...
South Canara.	Northern Circle ...	1	..	...	161	...	...	17,932	278	10,574	...	...	10,574	9,331	88·2	58·9	...	...
	Central do. ...	..	1	...	...	174	...	13,885	232	...	8,574	...	8,574	7,940	92·6	...	61·7	...
	Southern do. ...	...	...	1	...	..	145	15,752	239	...	...	8,445	8,445	7,453	88·3	...	...	53·6

* Old cases were also inspected.

† Information could not be furnished as the post of Deputy Inspector of Vaccination has been abolished.

STATEMENT No. VII—*Showing Inspection Work done by the Deputy Inspectors during the year 1913-14*—continued.

District.	Circle.	Number of inspecting officers. First-grade Deputy Inspectors.	Number of inspecting officers. Second-grade Deputy Inspectors.	Number of inspecting officers. Third-grade Deputy Inspectors.	Number of villages visited. First-grade Deputy Inspectors.	Number of villages visited. Second-grade Deputy Inspectors.	Number of villages visited. Third-grade Deputy Inspectors.	Total number of cases vaccinated.	Number of days spent on Inspection Duty.	Number of cases verified. First-grade Deputy Inspectors.	Number of cases verified. Second-grade Deputy Inspectors.	Number of cases verified. Third-grade Deputy Inspectors.	Total number of cases inspected by Deputy Inspectors of all sorts.	Total number of successful cases as reported by Deputy Inspectors.	Percentage of successful cases to the total number inspected as reported by Deputy Inspectors.	Proportion per cent of inspection to total number vaccinated. First-grade Deputy Inspectors.	Proportion per cent of inspection to total number vaccinated. Second-grade Deputy Inspectors.	Proportion per cent of inspection to total number vaccinated. Third-grade Deputy Inspectors.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Tanjore ...	Tanjore	1	...	...	216	...	...	10,220	195	7,833	...	...	7,833	6,678	85·3	76·6	...	...
	Negapatam	...	1	...	...	363	...	16,218	275	...	11,216	...	11,216	10,455	93·2	...	69·2	...
	Pattukkōttai	...	...	1	...	...	361	14,238	230	...	...	13,528	13,528	11,989	88·6	...	...	95·0
	Kumbakōnam	...	...	1	...	...	400	15,029	268	...	...	14,110	14,110	13,462	95·4	...	...	93·9
Tinnevelly ...	Sermadevi	...	...	1	..	...	300	21,157	260	...	...	18,762	18,762	16,978	90·5	...	...	88·7
	Srīvaikuntam	1	...	...	449	...	...	23,328	234	17,264	...	...	17,264	15,364	89·0	74·0	...	...
	Koilpatti	...	1	...	...	244	...	22,128	238	...	14,222	...	14,222	12,635	88·8	...	64·3	...
Trichinopoly.	Trichinopoly	1	...	...	986	...	...	26,473	224	15,634	...	...	15,634	13,917	89·0	59·1	...	...
	Ariyalūr	..	1	...	...	177	...	16,483	232	...	20,122	..	20,122	16,306	81·0	...	* 122·1	...
	Nāmakkal	...	...	1	...	...	628	21,978	251	...	...	18,990	18,990	17,024	89·6	...	...	86·4
Vizagapatam.	Gunupur	...	...	1	..	...	215	9,603	185	...	...	5,004	5,004	4,623	92·4	...	...	52·1
	Vizagapatam	...	1	...	...	346	...	30,115	251	...	15,746	...	15,746	12,241	77·7	..	52·3	...
	Vizianagram	...	...	1	...	...	415	37,814	256	...	...	22,317	22,317	16,487	73·9	...	...	59·0
	Pārvatīpuram	...	...	1	...	...	402	23,944	256	...	...	13,294	13,294	10,573	79·5	...	...	55·5
Koraput ...	Jeypore	...	1	...	..	859	...	16,924	227	...	10,368	...	10,368	6,915	66·7	...	61·3	...
	Koraput	...	1	...	...	719	...	10,215	220	...	7,579	...	7,579	6,274	82·8	..	74·2	...
	Total ...	21	23	36	11,094	12,312	14,049	1,505,229	19,117	286,878	310,460	439,722	10,37,060	868,827	83·8	69·9	68·8	68·3

* Old cases were also inspected.

Government of Madras.

LOCAL AND MUNICIPAL DEPARTMENT.

Recd.	1914.	*Enclosures*
Regd.		*Spare copies*

G.O. No. 1675 L., 25th September 1914.

Vaccination.

Reviewing the report on the working of the — Department in the Madras Presidency during the year 1913–14.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

Letter—from the Sanitary Commissioner, Madras.
To—the Secretary to Government, Local and Municipal Department.
Dated—the 27th August 1914.
No.—321/V.

ABSTRACT.—Submitting report on the working of the Vaccination Department in the Madras Presidency during the official year 1913-14.

Order—No. 1675 L., dated 25th September 1914.

The report on vaccination, which was due with the Government on the 1st July, was received on the 6th September. This serious delay is explained in paragraph 3 of the report.

2. The chief features of the year were—

(i) an increase of 5·7 per cent. in the total number of cases vaccinated ;

(ii) a rise under re-vaccinations of 2·5 per cent. in local fund areas, including the agency tracts, and of 2·8 per cent. in municipalities ;

(iii) an advance from 88·4 to 91·8 in the percentage of success under primary vaccinations and from 79·0 to 80·5 under re-vaccinations ;

(iv) an advance from 30·6 to 33·9 in local fund areas including agency tracts and from 47·1 to 50·7 in municipal areas in the number of successful operations per mille of the population ;

(v) a further increase of 7·7 per cent. in the number of successful operations on children under one year of age ;

(vi) a fall from As. 3–11 to As. 3–8 in the average cost of each successful case ;

(vii) an increase which more than counterbalanced the decrease of last year in the registered mortality from small-pox.

3. For purposes of vaccination the Presidency may in practice be divided into three classes of areas. The first class includes all municipal towns and a number of the more important villages in the Presidency as well as the areas where the " Trial scheme " is in force ; in these both infantile vaccination and registration of births are compulsory by law. The second class comprises those areas where infantile vaccination alone is compulsory but not registration of births. The third class includes the larger part of the Province, where neither vaccination nor registration is enforced by law.

During the year the Government decided to abandon the general extension of the " trial scheme " but gradually to improve the pay and prospects of the vaccination staff throughout the rural areas in the hope of thus improving the quality of their work.

4. Since the close of the year under report the Government have decided to drop the scheme for the maintenance of a reserve stock of calves for use at the vaccine section of the King Institute, the existing system of supply of calves by private contractors having been reported to be working satisfactorily.

(True Extract.)

W. Francis,
Ag. Secretary to Government.

To the Sanitary Commissioner.
,, Sanitary Engineer.
,, Surgeon-General.
,, Public Department.
,, Judicial ,,
,, Revenue ,,
,, Assistant Quartermaster-General
Ninth (Secunderabad) Division (with C.L.).
,, Director of Public Instruction.
,, Accountant-General.
,, President, Corporation of Madras.
To all Collectors.
,, Presidents, District Boards.
,, Chairmen, Municipal Councils.
Editors' Table.